PB88-241492

Summary of State VOC (Volatile Organic Compound) Regulations. Volume 2. Group 3 CTG (Control Technique Guidelines) and Greater Than 100 Ton Per Year Non-CTG VOC Regulations

Pacific Environmental Services, Inc., Durham, NC

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

May 88

U.S. Department of Commerce
National Technical Information Service

TECHNICAL REPORT DATA

(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA-450/2-88-004

2\.

3. RECIPIENT'S ACCESSION NO
PB88-241492

4. TITLE AND SUBTITLE
Summary of CTG VOC Regulations, Volume II-Group III CTG and greater than 100 ton per year Non-CTG VOC Regulations

5. REPORT DATE
May 1988

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)
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8. PERFORMING ORGANIZATION REPORT NO

9. PERFORMING ORGANIZATION NAME AND ADDRESS
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, North Carolina 27711

10. PROGRAM ELEMENT NO

11. CONTRACT/GRANT NO
68-02-4393

12. SPONSORING AGENCY NAME AND ADDRESS
Director, Office of Air Quality Planning and Standards
Office of Air and Radiation, US EPA
Research Triangle Park, North Carolina 27711

13. TYPE OF REPORT AND PERIOD COVERED

14. SPONSORING AGENCY CODE
EPA/200/04

15. SUPPLEMENTARY NOTES

16. ABSTRACT

In April of 1985, EPA published Summary of State VOC Regulations (EPA-450/2-85-003), which summarized regulations for Group I, II, and III CTG's and >100 tpy non-CTG categories as of August 1, 1984. This document updates and expands parts of that publication; specifically it presents summaries of State and local regulations for Group III CTG's and >100 tpy non-CTG regulations. Information used to compile this document was collected from all 10 EPA regions in early 1987.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air pollution regulations Volatile organic compounds Reasonably Available Control Technology Control Technique Guidelines	Air Pollution Control	13B

18. DISTRIBUTION STATEMENT
Release unlimited. Available through NTIS.

19. SECURITY CLASS (This Report)
Unclassified

20. SECURITY CLASS (This page)
Unclassified

21. NO. OF PAGES
255

22. PRICE
A12 25.95

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

United States
Environmental Protection
Agency

Air

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/2-88-004
May 1988

PB88-241492

EPA

Summary of State VOC Regulations-Volume 2. Group III CTG and Greater Than 100 Ton Per Year Non-CTG VOC Regulations

REPRODUCED BY
U.S. DEPARTMENT OF COMMERCE
NATIONAL TECHNICAL
INFORMATION SERVICE
SPRINGFIELD, VA 22161

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May 1988

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Air Quality Management Division
Research Triangle Park, North Carolina 27711

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This report was furnished to the U.S. Environmental Protection Agency by Pacific Environmental Services, Inc., Durham, North Carolina 27707 in fulfillment of Contract No. 68-02-4393, Work Assignment No. 1. This document has been reviewed by the Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Environmental Protection Agency. Every attempt has been made to make this publication as complete and accurate as possible; however, it does not constitute a legal compilation of Federally approved regulations. The reader should refer to The Code of Federal Regulations and to the appropriate State or local regulations for official interpretations.

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PREFACE

This document updates and expands those portions of the Environmental Protection Agency (EPA) document Summary of State VOC Regulations published in April 1985 (EPA-450/2-85-003) (Volume 1) covering Group III and greater than 100 tons per year non-CTG source category regulations. Information used in this project to compile Volume 2 was collected from all 10 EPA Regional Offices in early 1987.

Volume 1 contains regulatory summaries of the Group I and II CTG source categories. Volume 1 also contains now outdated information on Group III CTG's and >100 tpy non-CTG source regulations.

Volume 2 presents updated regulatory summaries for Group III and greater than 100 tpy non-CTG sources. A State-by-State summary of regulatory development status appear in Tables 1 and 2 of this volume. Table 3 provides summaries of the regulations of the Group III source categories by source category; Table 4 summarizes the non-CTG regulations. Table 5 summarizes reasonably available control technology (RACT) determinations, where provided by the EPA Regional Offices.

To facilitate future update of the contents of this document, EPA Regional and State contacts listed in Appendix A of Volume 2 are encouraged to provide corrections and new material to OAQPS's Air Quality Management Division on a periodic basis. If sufficient revisions are received, then updates will be sent to all EPA Regional Offices for dissemination within the Region and to the State and local air pollution control agencies.

EXECUTIVE SUMMARY

State Implementation Plans (SIP's) for all nonattainment areas were developed to demonstrate attainment of the ozone standard by 1982. These SIP's were required at a minimum to contain regulations for volatile organic compound (VOC) emitting sources that are based on the Environmental Protection Agency's (EPA's) Group I and Group II Control Techniques Guidelines (CTG) documents. In addition, some States requested an extension to 1987 to meet the ozone standard and some areas were required to revise their ozone SIP's because they did not attain the standard by the end of 1982. These areas were required also to control Group III CTG source categories and all other non-CTG source categories that emit greater than 100 tons per year of VOC. However, in many areas, implementation of these CTG regulations did not achieve the necessary reductions in VOC emissions required by the application of the ozone models, i.e. city-specific EKMA, Urban Airshed, etc. Such States, as well as those that were scheduled to attain the ozone standard by 1987, have had to go beyond these guideline documents and obtain reductions from sources emitting less than 100 tpy in source categories covered by Group I and II CTG's. The EPA is interested in providing information for States to help them develop the most effective regulations pertinent to source categories in their areas to further reduce VOC's, especially in those areas that have not achieved the ozone standard by 12/31/87.

In April of 1985, EPA published Summary of State VOC Regulations (EPA-450/2-85-003), which summarized regulations for Group I, II, and III CTG's and >100 tpy non-CTG categories as of August 1, 1984. This document updates and expands parts of that publication; specifically it presents summaries of State and local regulations for Group III CTG's and >100 tpy non-CTG regulations. Information used to compile this document was collected from all 10 EPA regions in early 1987.

The 1985 document showed that 14 Group III CTG regulations were in some stage of development (under development or pending approval) or were approved. Further, 79 regulations were under development, pending approval, or approved in 22 non-CTG source categories emitting >100 tpy. By comparison, 55 Group III CTG regulations are in one of the three stages of development or approval and, as of early 1987, 174 regulations are under development, pending approval, or approved in over 55 non-CTG source categories emitting greater than 100 tpy.

Eight states have chosen to develop some type of general rule to cover non-CTG sources of VOC. Five other States have chosen to regulate non-CTG source categories on a case-by-case basis using a general RACT regulation. All the remaining States are developing regulations on a source category basis.

Only regulations that are pending approval or are already Federally approved are summarized in Tables 3 and 4 of this document. However, regulations under development are noted in Tables 1 through 4. This notation is presented in order to facilitate exchange of information among States, local areas, and EPA Regional Offices in the development of future regulations.

EXPLANATORY NOTES

The purpose of this section is to provide the reader with a better understanding of the various source categories and their regulations.

Manufacture of High Density Polyethylene, Polypropylene, and Polystyrene

- This source category includes regulations that cover process emissions only. Regulation of fugitive emissions (equipment leaks) from these and other polymer manufacturing facilities are identified under the SOCMI-Fugitive Emissions source category.

- Most of the regulations summarized herein are based on the CTG document. Both California regulations for the Bay Area and the South Coast are for all resin manufacturers. As noted in Table 1, some regulations affect polystyrene plants only because the other two types of polymer manufacturing plants covered by the CTG are not found in those states.

Natural Gas/Gas Processing Plants

- In California, the South Coast Agency has three rules affecting these plants. These rules are found under source categories for "valves/flanges" and "pumps and compressors."

SOCMI Fugitive Emissions

- This source category also includes fugitive emissions from polymer manufacturing plants. Most state regulations apply to polymer manufacturing plants. Where this is the case, it has been noted in the table.

- In California, the Bay Area and South Coast agencies regulate SOCMI fugitive emissions under three separate rules, rather than under one "SOCMI" rule. For both of these California agencies, these rules are summarized in the source categories for "valves/flanges" and "pumps and compressors."

Ethylene Production Plants

- This source category covers regulations that affect emissions from plants that manufacture ethylene, plants that use ethylene as a raw material, and plants that emit ethylene in the production of low density polyethylene.

General Regulation for Storage, Disposal, Transfer of VOC's

- Regulations included here may in some cases overlap the Group I CTG for storage of petroleum liquid in fixed roof tanks and also the Group II CTG for storage of petroleum liquid in external floating roof tanks.

- These regulations frequently cover "small" tanks and deal with the storage of "highly" volatile organic compounds. The summaries in many cases include descriptions of controls for small tanks and highly volatile organic compounds here rather than in the separate categories for small tanks and storage of highly volatile organic compounds because of the "tightly-knit" nature of the wording of the regulation.

Small (Fixed or External Floating Roof) Tanks

- A regulation was considered to be a "small" tanks rule if it affected tanks with storage capacities of less than 40,000 gallons.

- In most cases, small tank rules are summarized under the "General Regulation for Storage, Disposal, Transfer of VOC's." Where this has been done, it is indicated in the table. Where a state has a clearly defined and separate "small" tank rule, the summary of the rule is found under this source category.

Storage of Highly Volatile Organic Compounds

- A "highly" volatile organic compound is considered in this summary to be one with a vapor pressure of more than 11.0 pounds per square inch absolute (psia).

- Most general regulations for storage, transfer, or disposal of VOC's apply controls to VOC compounds with psia's greater than 1.5, and do not specify an upper limit. The applicable controls are differentiated though in many of these regulations depending on the vapor pressure.

- In general, only those regulations that either have a clearly identifiable separate regulation for storage of highly volatile organic compounds or have different control requirements for VOC's with vapor pressures greater than 11 psia or other higher designated psia are identified as having rules for this source category.

Surface Coating - Heavy Off-Highway Vehicle Production

- The rules summarized for this source category are part of the more general miscellaneous metal parts and products coating rules.

Waste Gas Disposal

- This category covers two types of rules: (1) general waste gas rules affecting emissions from manufacturing processes and (2) waste gases emanating from active or inactive landfills.

TABLE 1

SUMMARY OF REGULATORY STATUS FOR GROUP III CTG SOURCES

Table 1. SUMMARY OF REGULATORY STATUS FOR GROUP III CTG SOURCES[a]

Source/Industry	REGION 1						REGION 2			REGION 3						REGION 4								REGION 5					
	CT	ME[b]	MA	NH[b]	RI	VT[c]	NJ	NY[b]	NYC Metro	DE	DC	MD	PA	VA	WV[c]	AL	FL	GA	KY	MS[c]	NC	SC[c]	TN	IL	IN	MI	MN[c]	OH	WI
A. Large Petroleum Drycleaners	X		+		X		0		+	X	■	e	f	X		0	0	0	X		■		*	0	X	+		0	■
B. Manufacture of High Density Polyethylene, Polypropylene & Polystyrene Resins	0		■		X		■[h]		X	X	X	X	Ø	X		X	*	X	X		■		*	Ø[i]	X	Ø[i]		0[i]	X[j]
C. Natural Gas/Gas Processing Plants	X		X		X		0		X	X	X	X	X	X		X	*	X	X		*		*	X	X	Ø		X	+
D. SOCMI Fugitive Emissions	0		0		X		0		Ø	0[f]	X	X	Ø	X		X	*	X	0		■		*	Ø	X	Ø		0	X
E. SOCMI - Air Oxidation	X		X		X		Ø		X	Ø	X	X	f	X		X	*	X	0		*		*	Ø	X	X		0	X

Table 1. SUMMARY OF REGULATORY STATUS FOR GROUP III CTG SOURCES[a]
(concluded)

Source Industry	REGION 6					REGION 7					REGION 8						REGION 9						REGION 10				
	AR[c]	LA	NM[c]	OK	TX	IA[c]	KS	MO (KC)	MO (St.L.)	NE[c]	CO	MT[c]	ND[c]	SD[c]	UT[d]	WY[c]	AZ	CA (BA)	CA (SD)	CA (SC)	HI[c]	NV	AK[c]	ID[c]	OR	WA (PS)	WA
A. Large Petroleum Drycleaners		X		+	*		X	X	X		X				X		■	■	■	■		*			+	■[g]	+
B. Manufacture of High Density Polyethylene, Polypropylene & Polystyrene Resins		0		X	Ø		X	X	Ø[i]		X				X		X	■	*	e		*			X	X	X
C. Natural Gas/Gas Processing Plants		0		+	Ø		X	X	X		X				X		X	■	X	■		*			X	X	X
D. SOCMI Fugitive Emissions		0		+	■		*	*	0		X				X		*	■	*	■		*			X	X	X
E. SOCMI - Air Oxidation		X		+	Ø		X	X	■		X				X		*	*	*	*		*			X	X	X

[a] * = No regulations; no sources
X = No regulations; no sources in nonattainment area
+ = No regulations; sources are <100 tpy
Ø = Regulation under development
0 = Approval of regulation pending
■ = EPA approved regulation.

[b] Area is entirely either attainment or rural nonattainment, and therefore, is not required to have Group III CTG regulations.

[c] Entire State attainment for ozone.

[d] Utah requires BACT for all sources if no other specific regulations are in place.

[e] Regulation under development; sources <100 tpy.

[f] Permits to be reviewed for RACT determination.

[g] Puget Sound Air Pollution Control Agency regulation only; covers King, Kitsap, Pierce, and Snohomish Counties.

[h] New Jersey's general rule (see Table 2) applies to polymer manufacturing.

[i] This regulation covers polystyrene only. Michigan has a "100 tpy non-CTG" resin manufacturing rule under development.

[j] Has a "resin manufacturing" rule under development.

TABLE 2

SUMMARY OF REGULATORY STATUS FOR GREATER THAN 100 TONS-PER-YEAR NON-CTG SOURCES

Table 2. SUMMARY OF REGULATORY STATUS FOR GREATER THAN 100 TPY NON-CTG SOURCES^{a}

Source/Industry	REGION 1						REGION 2			REGION 3						REGION 4								REGION 5					
	CT^{b}	ME^{c}	MA^{b}	NH^{c}	RI^{b}	VT^{d}	NJ	NY^{c}	NYC Metro	DE	DC	MD^{e}	PA	VA	WV^{d}	AL	FL^{e}	GA^{e}	KY	MS^{d}	NC^{e}	SC^{d}	TN^{b}	IL^{e}	IN	MI	MN^{d}	OH^{b}	WI
A. General Rule							■	⊘	⊘			■					⊘	0			■			⊘					
B. RACT (Case-by-Case)	■		■		■				⊘														■					⊘	
C. Adhesives-Aerospace												⊘																	
D. Adhesives/Deadners	+				X							⊘																	
E. Adhesives Manufacturing												⊘																	
F. Aerosol Can Filling					X																								⊘
G. Agricultural Chemicals																													
H. Airplane Refueling Areas	+				+																								
I. Architectural Coatings	■				+		⊘		⊘		⊘	⊘	$+^{h}$																
J. Asphaltic Pitch - Roof Coating					X																								
K. Auto Refinishing							⊘		⊘																				
L. Bakeries	⊘				+																								
M. Bubbles	■		0		■		■	0	0			i	■																
N. Cleanup Solvents	+				+																								
O. Coatings & Inks Manufacture	+				+											0^{k}										⊘^{k}			⊘^{k}
P. Coke By-Products Plants					X								h	X		0			■					0	⊘				
Q. Consumer/Commercial Solvent Use							⊘		⊘																				
R. Dock Loading Facilities					+		⊘						h	X															
S. Ethylene Production Plants and Plants using Ethylene					X						■		■			■			■										
T. General Regulation for Storage, Transfer, Disposal of VOC's	+				+		■				■					■			■										
U. Graphic Arts-Foil														⊘															
V. Graphic Arts-Litho												■		h															
W. Heatset Web-Offset					X																			⊘					
X. Industrial Maintenance Coatings					X																								
Y. Laminated Counter Tops					X									X		0													
Z. Marine Coating	+				+									X											⊘				
AA. Metal Rolling					X									⊘															
AB. Munitions														X															
AC. Nylon Fibers Mfg.														⊘															
AD. Organic Solvents	■				■						■								■										
AE. Paints & Resins Manufacturing												⊘	⊘			0										⊘			⊘
AF. Polyethylene Bag Sealing Operations					X																								

Source/Industry	REGION 1						REGION 2			REGION 3						REGION 4								REGION 5					
	CT[b]	ME[c]	MA[b]	NH[c]	RI[b]	VT[d]	NJ	NY[c]	NYC Metro	DE	DC	MD[c]	PA	VA	WV[d]	AL	FL[e]	GA[e]	KY	MS[d]	NC[e]	SC[d]	TN[b]	IL[e]	IN	MI	MN[d]	OH[b]	WI
AG. Pumps and Compressors	■				+						■[r]		+[h]			■													
AH. Semiconductor Manufacture					X								+[h]																
AI. Small Tanks	+				+		■[v]						X			■[v]			■[v]										
AJ. SOCMI-Bath Processes	+				X																								
AK. SOCMI-Reactor Processes	+				+																								
AL. SOCMI-Distillation	+		⊘		X																								
AM. Solvents Disposal	■		■		X							■																	
AN. Stage II Controls	+		⊘		+		⊘		0		■					0													
AO. Storage of Highly Volatile Organic Compounds	+				X		■[v]												■[v]										
AP. Sulfonate Manufacturing													⊘																
AQ. Surface Coating - Aerospace					X											0							■						
AR. Surface Coating - Glass							0																						
AS. Surface Coating - Heavy Off-Highway Vehicle Production					X																			⊘					
AT. Surface Coating - Leather					X		0																						⊘
AU. Surface Coating - Photographic Film			■[z]																										
AV. Surface Coating - Plastic Film					X																								
AW. Surface Coating - Plastic Parts	+											⊘														⊘			
AX. Surface Coating-Tablets							0						⊘																
AY. Surface Coating-Urethane Coated Fabric							0																						
AZ. Surface Coating - Wood Furniture	+				+		0						⊘											0[aa]	⊘				
BA. Tobacco Processing														⊘															
BB. Valves/Flanges at Chemical Plant	+				+																								
BC. Vegetable Oil Processing					+																			X					
BD. Waste Gas Disposal	■				X						■																		
BE. Water Separation	■				X							■	[h]			■			■										
BF. Wool Fiberglass Mfg.																													

Table 2. SUMMARY OF REGULATORY STATUS FOR GREATER THAN 100 TPY NON-CTG SOURCES[a]

	REGION 6					REGION 7					REGION 8						REGION 9						REGION 10				
	AR[d]	LA	NM[d]	OK[b]	TX[e]	IA[d]	KS	MO (KC)	MO (St.L.)	NE[d]	CO	MT[d]	ND[d]	SD[d]	UT[f]	WY[d]	AZ	CA (BA)	CA (SD)	CA (SC)	HI[d]	NV	AK[d]	ID[d]	OR	WA (PS)	WA
A. General Rule					■[g]																						
B. RACT (Case-by-Case)																											
C. Adhesives-Aerospace																											
D. Adhesives/Deadners								⊘	⊘											■							
E. Adhesives Manufacturing				+																							
F. Aerosol Can Filling																											
G. Agricultural Chemicals								⊘																			
H. Airplane Refueling Areas				+																		■					
I. Architectural Coatings				■[w]	⊘												X	■	■	■							
J. Asphaltic Pitch - Roof Coating																									■		
K. Auto Refinishing					⊘																						
L. Bakeries				+														⊘									
M. Bubbles		⊘						⊘	⊘									■[m]	■[m]	■[m]							
N. Cleanup Solvents				■	■																						
O. Coatings & Inks Manufacture								O[k]	■[k]									■		■							
P. Coke By-Products Plants				+							X																
Q. Consumer/Commercial Solvent Use					⊘																						
R. Dock Loading Facilities																						■					
S. Ethylene Production Plants and Plants Using Ethylene				■	■																						
T. General Regulation for Storage, Transfer, Disposal of VOC's		■		■	■						■				p			■	■	■		■					
U. Graphic Arts-Foil																											
V. Graphic Arts-Litho								⊘																			
W. Heatset Web-Offset				+																							
X. Industrial Maintenance Coatings				■[w]														■[q]	■[q]	■[q]							
Y. Laminated Counter Tops																											
Z. Marine Coating																				⊘							
AA. Metal Rolling																											
AB. Munitions																											
AC. Nylon Fibers Mfg.																											
AD. Organic Solvents		■		■														■	■								
AE. Paints & Resins Manufacturing								O	■																		
AF. Polyethylene Bag Sealing Operations				+					■																		

Source/Industry	REGION 6					REGION 7					REGION 8						REGION 9						REGION 10				
	AR[d]	LA	NM[d]	OK[b]	TX[e]	IA[d]	KS	MO (KC)	MO (St.L.)	NE[d]	CO	MT[d]	ND[d]	SD[d]	UT[f]	WY[d]	AZ	CA (BA)	CA (SD)	CA (SC)	HI[d]	NV	AK[d]	ID[d]	OR	WA (PS)	WA
AG. Pumps & Compressors		■		■							X				s			■		■							
AH. Semiconductor Manufacture																		■									
AI. Small Tanks		■		■	■[t]													■	■[v]	■[v]							
AJ. SOCMI-Bath Processes				+																							
AK. SOCMI-Reactor Proc.				+																							
AL. SOCMI-Distillation				+																							
AM. Solvents Disposal																											
AN. Stage II Controls				u	0				■									■	■	■							
AO. Storage of Highly Volatile Organic Compounds		■[v]		■[v]	■[v]						■							■[v]	■[v]	■[v]							
AP. Sulfonate Manufacturing																											
AQ. Surface Coating - Aerospace				■[w]	0				■									■	■	■						■[y]	
AR. Surface Coating - Glass																				■							
AS. Surface Coating - Heavy Off-Highway Vehicle Production								■	■									■		■							
AT. Surface Coating - Leather																											
AU. Surface Coating - Photographic Film																											
AV. Surface Coating - Plastic Film				+							■							■		■							
AW. Surface Coating - Plastic Parts									■									■		■							
AX. Surface Coating - Tablets																				+							
AY. Surface Coating-Urethane Coated Fabric																											
AZ. Surface Coating - Wood Furniture				+														■		■							
BA. Tobacco Processing																		■		■							
BB. Valves/Flanges at Chemical Plant																											
BC. Vegetable Oil Processing																		0 ■[bb]		+ U[bb]							
BD. Waste Gas Disposal		■		■	■[g]																						
BE. Water Separation		■		■	■													■	■	■							
BF. Wool Fiberglass Mfg.							0																				

[a] X = No regulations; no sources in nonattainment area
+ = No regulations; sources are <100 tpy
⊘ = Regulation under development
O = Approval of regulation pending
● = EPA approved regulation.

[b] State has developed or is developing a RACT case-by-case regulation. Regulations for entire source categories will not be developed, except where indicated.

[c] Area is entirely either attainment or rural nonattainment, and therefore, is not required to have >100 tpy non-CTG regulations.

[d] Entire State attainment for ozone.

[e] State has developed or is developing a general rule. Regulations for specific source categories will not be developed, except where indicated.

[f] Utah requires BACT for all sources if no other specific regulations are in place. Utah can better address the non-CTG sources after inventory is completed in late 1987.

[g] General vent gas control rule.

[h] No regulations; sources >100 tpy.

[i] Most emissions during winter.

[k] Covered under paints and resins manufacturing regulation.

[l] State approved regulation; not Federally approved; not in use.

[m] Bubble or alternative emission control plan provisions contained in individual source category rules.

[n] Indiana is relying upon NESHAPs to control coke by-product plants.

[p] Gasoline transfer and storage.

[q] Region IX regulates this category under architectural coatings.

[r] No major sources (>100 tpy).

[s] For refinery equipment.

[t] In Texas, EE= rule requires submerged fill on tank >1,000 gal; floating roof or VRU if >25,000 gal.

[u] No control anticipated.

[v] Covered under general regulation for storage, transfer, disposal of VOC's

[w] Covered under generic surface coating rule; see "Surface Coating - Aerospace" for description of rule.

[y] Puget Sound Air Pollution Control Agency regulation only; covers King, Kitsap, Pierce and Snohomish Counties.

[z] In Massachusetts, the paper coating regulation covers photographic film.

[aa] Transfer efficiency test method under development.

[bb] Waste gas disposal from landfills.

TABLE 3

SUMMARY OF GROUP III CTG VOC REGULATIONS BY SOURCE CATEGORY

SOURCE CATEGORY: Large Petroleum Drycleaners

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.8	Approval pending	(a) For dryer, either: vapor control system that controls VOCs to ≤7.7 lb VOC/220 lb (dry weight) of articles drycleaned; or solvent recovery dryer operated such that dryer remains closed and recovery phase continues until attain 0.013 gal/min. final recovered solvent. (b) For filtration system, either: ≤2.2 lb VOC/220 lb (dry weight) of material cleaned in all filtration wastes before disposal and atmospheric exposure; or cartridge filtration system where filter cartridges are drained in sealed housings for ≥8 hrs before removal. (c) No VOCs emitted from any visibly leaking equipment or containers of VOC or VOC-laden waste open to atmosphere.	(a) Dryers that consume <15,000 gal/yr.
III	D.C.	706	Approved	(a) For dryer, either average of ≤3.5 lb VOC/100 lb (dry weight) articles drycleaned; or operate solvent recovery dryer such that remains closed and recovery phase continues until attain 50 ml/min final recovered solvent flow rate. (b) For filtration system either: ≤1 lb VOC/100 lb (dry wt of articles drycleaned) in filtration waste before disposal and atmospheric exposure; or cartridge filter system where cartridges are drained in their sealed housings for ≥8 hrs before removal. (c) Store all vacuum still wastes so as to minimize VOC emissions. (d) Repair all petroleum solvent vapor and liquid leaks within 3 days. (e) Inspect all applicable operations weekly to identify perceptible vapors and leaks.	Not specified

SOURCE CATEGORY: Large Petroleum Drycleaners

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved methods. [7:27-16.9]	Not specified	Not specified	(a) Compliance acheived by 10/31/87.
For dryer control device: (a) EPA RM 1, 2, 25A with other specifications listed in 706.7(a). (b) Calculate any weight of articles drycleaned. (c) Repeat (a) and (b) above for normal operating conditions ≥30 dryer loads, ≥4,000 lb (dry wt) and normal variety of fabrics, solvents, load weights, temperatures, flow rates, and process deviations. (d) Must verify that recovered solvent flow rate after recovery phase ≤50 ml/min. (e) For (d) above, ≥50% of dryer loads shall be monitored over period ≥2 weeks for final recovery flow rate measured from the solvent-water separator. For filtration system: (f) ASTM RM D322-80 for ≥5 two-pound filtration waste samples at intervals of ≥1 week. (g) Calculate dry weight of articles drycleaned and total mass filtration waste between samples.	(a) For test procedure (d) ≥2 weeks.	(a) Record weight of VOC's from dryer. (b) Record dry weight of articles drycleaned. (c) Record weight of VOC's calculated in filtration waste. (d) Record weight of VOC's in filtration waste per 100 lbs articles drycleaned.	(a) Applies to petroleum solvent washers, dryers, solvent filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvent. (b) Compliance achieved by 9/1/86.

SOURCE CATEGORY: Large Petroleum Drycleaners (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/Cutoffs
IV	AL	8.24	Approval pending	(a) For dryer, either ≤ 3.5 kg VOC/100 kg (dry weight) articles drycleaned; or operate solvent recovery dryer such that remains closed and recovery phase continues until attain 50 ml/min. final recovered solvent flow rate. (b) For filtration system, either <1 kg/100 kg (dry weight of articles drycleaned) in filtration waste before disposal and atmospheric exposure; or cartridge filtration system where filter cartridges are drained in sealed housings for ≤8 hours before removal. (c) Repair all solvent vapor and liquid leaks ≤3 working days.	Facilities that consume <123,026 of petroleum solvent/yr.
IV	FL	(12)(c)	Approval pending	(a) All dryers must be solvent recovery dryers that are properly installed, operated, and maintained. (b) All filters shall be cartridge filters. Such filters shall be drained in their sealed housings for at least eight hours prior to removal. (c) Inspect equipment for leaks every 15 days; repair leaks ≤15 days.	(a) Facilities with total rated dryer capacity of <84 lbs of articles.
IV	GA	391-3-1(qq)	Approval pending	(a) ≤3.5 lb/100 lb (dry wt) of articles drycleaned. (b) <1 lb VOC/100 lb (dry wt) articles drycleaned in filtration waste before disposal and atmospheric exposure; or operate cartridge filtration system where cartridges drain in seal housing ≥8 hrs before removal. (c) Repair all petroleum solvent vapor and liquid leaks within 3 days.	Not specified
IV	NC	.0945	Approved (5/1/85)	(a) For dryer, average ≤3.5 lb VOC/100 lb (dry wt) of articles drycleaned; or operate solvent recovery dryer such that remains closed and recovery phase continues until attain 50 ml/min. final recovered solvent flow rate. (b) For filter, <1 lb VOC/100 (dry wt) of articles drycleaned in filter waste before disposal and atmospheric exposure; or operate cartridge filtration system so cartridges drain in sealed housing ≥8 hrs before removal. (c) Inspect facilities each 15 days; repair leaks ≤15 days.	(a) Facilities consuming <32,500 gal/yr petroleum solvent.

Test Procedure	Averaging Time	Recordkeeping	Comments
For dryer: (a) EPA RM 1, 2, 25A with other specifications listed in 8.24.4 (a)(1). (b) Calculate, record dry weight of articles drycleaned. (c) Repeat (a) and (b) above for normal operating conditions >30 dryer loads, ≥1800 kg dry weight and normal variety of fabrics, solvents, load weights, temperatures, flow rates, and process deviations. (d) Must verify that recovered solvent flow rate after recovery phase <50 ml/min. Monitor ≥50% of dryer loads over period ≥2 weeks. For filtration system: (e) ASTM D322-80 for ≥5 kg samples of filtration waste taken at intervals ≥1 week. (f) Calculate dry weight of articles drycleaned and total mass filtration waste between samples. For leaks: (a) Weekly inspections of equipment ment listed to identify perceptible leaks.	For test procedure(s), ≥2 weeks.	(a) Record and report weight of VOC's from dryer. (b) Record and report dry weight articles drycleaned. (c) Record and report weight of VOC's in filtration waste as calculated. (d) Record and report weight of VOC's in filtration waste per 100 lbs articles drycleaned.	(a) Applies to petroleum solvent washers, dryers, solvent filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvent. (b) Applies to Jefferson County, AL (Birmingham).
Not specified	Not specified	Not specified	Labels outlining inspection program for leaks required on each affected facility.
Not specified	Not specified	(a) Maintain records to demonstrate compliance. (b) Retain for 2 yrs.	
(a) LPA RM 25a as directed in .0945(f). (b) Calculate dry weight of articles cleaned for normal operating conditions of ≥30 dryer loads and ≥4000 lbs representative of normal variation in fabrics, solvents, load weights, temperatures, flow rates, and process deviations. (c) Verify that recovered solvent flow rate after recovery phase ≥50% of dryer loads for final recovery flow rate measured from the solvent-water separator.	(a) For test procedure (c), ≥2 weeks.	(a) Maintain records of inspection dates and results, leaks detected, and dates and descriptions of repairs. (b) Record dry weight of articles cleaned.	Applies to washers, dryers, solvent filters, settling tanks, stills, and other containers and conveyors of petroleum solvent.

SOURCE CATEGORY: Large Petroleum Drycleaners (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
V	IL	Subpart Z 215.607	Approval pending	(a) For a dryer, average ≤3.5 kg/100 kg (dry wt) of articles cleaned; or operate solvent recovery dryer in manner such that dryer remains closed and recovered phase continues until attain ≤50 ml/min. recovered solvent flow rate. (b) For filtration waste, ≤1 kg/100 kg (dry wt) of articles cleaned before waste disposal or atmospheric exposure; or install and operate cartridge filtration system where cartridges are drained in their sealed housings ≥8 hrs before removal. (c) Follow good housekeeping practices as described. (d) Weekly, visually inspect equipment as described. (e) Repair vapor and liquid leaks ≤3 days of detection or parts receipt.	(a) Facilities with emissions <100 tpy without control.
V	OH	3745-21-09 (BB)	Approval pending	(a) For a dryer, ≤3.5 lb VOC/100 lbs (dry wt) of articles cleaned; or operate solvent recovery dryer such that remains closed and recovery phase continues until attain 50 ml/min. final recovered solvent flow rate. (b) For a filter, ≤1 lb VOC/100 lb (dry wt) of articles cleaned in filtration waste, before disposal and atmospheric exposure; or cartridge filter system where cartridges are drained in their sealed housings for ≥8 hrs before removal. (c) Cover all containers of petroleum solvent or solvent-laden wastes. (d) Visually inspect equipment weekly for liquid leaks. (e) Repair ≤15 days from detection or delivery of part.	Not specified
V	WI	NR423.05	Approved 10/1/86	(a) For a dryer, average ≤3.5 kg/100 kg (dry wt) of articles cleaned; or operate solvent recovery dryer in manner such that dryer remains closed and recovered phase continues until attain ≤50 ml/min. recovered solvent flow rate. (b) For filtration waste, ≤1 kg/100 kg (dry wt) of articles cleaned before waste disposal or atmospheric exposure; or install and operate cartridge filtration system where cartridges are drained in their sealed housings ≥8 hrs before removal. (c) Repair vapor and liquid leaks in ≤3 days of detection or parts receipt.	(a) Facilities emitting ≤100 tpy. (b) Counties other than Kenosha, Milwaukee, Ozaukee, Racine, Washington, Waukesha.
IX	AZ	R9-3-525	Approved	Use only Stoddard, 140 (safety solution) or other nonphotochemical reactive solvent.	Reduce solvent emissions to ≥90%.
IX	CA (BA)	8-17-100	Approved	(a) Must vent drying tumbler and cabinet exhaust gases through vapor condensation or other control device that either reduces emissions ≥85% (wt) or reduces emissions during entire drying cycle to 100 ppm.	Dry cleaners consuming <5,013 gal solvent per year.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Visual inspection for limits (b) and (c). (b) EPA 450/3-82-009 (1982) for final solvent flow rate or VOC content of filtration waste. (c) Method 25 for control device.	Not specified	Not specified	
(a) For VOC emission rate from dryer: test under normal operating conditions as specified for ≥30 dryer loads, ≥4000 lbs of articles cleaned, and normal variety of fabrics, solvents, load weights, temperatures, flow rates, and process deviations [3745-21-10(L)]. (b) For VOC content of filtration waste: test under normal operating conditions for >3 time periods as described [3745-21-10(M)]. (c) To determine operation time of recovery cycle of dryer: test as specified under normal operating conditions, monitor ≥50% of loads for final recovery flow rate at solvent-water separation outlet [3745-21-10(N)].	For test procedure (c), ≥2 weeks.	(a) For each dryer load, weight to 0.5 pounds of articles to be cleaned, articles to be dried after washing cycle, articles removed from dryer, recovered liquid materials [3745-21-10(L)]. (b) For test procedure (b), date and time of time period beginning and end, weight of articles cleaned in washer connected to filter, waste weight at end of time period [3745-21-10(M)].	
Not specified	Not specified	Not specified	Applies to petroleum liquid solvent washers, dryers, solvent filters, settling tanks, vacuum filters, piping, ductwork, pumps, storage tanks, and other containers and conveyors of petroleum liquid solvent.
Procedures contained in "Arizona Testing Manual for Air Pollution Emissions" [R9-3-310].	Not specified	Not specified	If any fume, gas, vapor, etc., discharges to adjoining property, Director may require abatement equipment.
Not Specified	For limit (a), if emissions limited to 100 ppm, must be averaged over 15 min. before dilution.	Not specified	

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (SD)	67.2	Approved	(a) No liquid leaks from equipment. (b) Solvent stored in closed containers (approved vents permissable). (c) Except when required for proper operation and maintenance, keep closed all washer lint traps, button traps, access doors, other where solvent exposed to atmosphere. (d) Store still residue in sealed container or underground tank; dispose at class I dump; incinerator, or approved equivalent. (e) Reduce hydrocarbon vapors from drying cycle cycle by $\geq$ 90% by venting entire dryer or drying cabinet exhaust through carbon absorber or other control device (f) Used filtering material in sealed container and dispose at Class I dump unless: -Cartridge filters containing paper or carbon are drained in filter housing $\geq$ 12h before removal -diatomaceous earth filtering system used with solvent extractor or equivalent so < 0.4lb. solvent remains per pound filter powder and soil removed or -any other system that emits < 1 lb. solvent per 100 pounds of articles cleaned	(a) Dry Cleaners using $\leq$ 2000 gal petroleum based solvent/ yr. (b) Identical replacements of equipment, or equipment that does not increase solvent consumption.
IX	CA (SC)	1102	Approved 2/3/83	(a) No liquid leaks (b) Close washer lint traps, button traps, access doors, and other parts of equipment where solvent maybe exposed to atmosphere. (c) Store still residue in sealed containers. (d) Used filtering material, either: -immediately place in sealed container, -use cartridge filters containing paper or carbon and drain in housing > 12 hours after removal, -diatomaceous earth filtering system uksed with solvent extractor or equivalent so < 0.4 kg solvent remains per kg filter powder and soil removed, or -approved equivalent. (e) $\geq$ 90% control of drying tumbler and cabinet exhaust gases through carbon absorption or equivalent.	(a) after 1/6/85.
X	WA	3.07	Approved	(a) Articles dried in solvent recovery dryer or dryer exhaust vented through control device that emits $\leq$ 3.5 kg VOC/100 kg (dry wt) cleaned articles (b) Drain all cartridge filtration systems in their sealed housings $\geq$ 8hr. (c) Store vacuum still distillation wastes in Sealed containers. (d) Repair or replace leaking components $\leq$ 3 working days.	(a) Systems consuming < 15,000 gal/year petroleum solvent

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not Specified	Not specified	(a) Applies to equipment installed after 1/31/78 as of 1/31/78; equipment installed before 1/31/78; subject after 1/1/80 if solvent consumption ≥ 10,000 gal/year.
Not Specified	Not Specified	Not Specified	(a) Effective 3/7/78

SOURCE CATEGORY: Manufacture of High Density Polyethylene, Polypropylene, Polystyrene Resins

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22a-174-20 (v)	Approval pending	(a) ≤0.12 Kg VOC/1000 Kg product from the styrene condenser vent stream and styrene recovery unit condenser vent stream. (b) Use surface condensors or equivalent for control.	Not specified
I	MA	310 CMR7.18 (18)	Approved 8/31/87	(a) ≤0.12 lb VOC/1,000 lb product from the material recovery section. (b) Within 150 days from effective date of regulation, either demonstrate compliance or submit proposed compliance plan showing compliance by no later than 12/31/86.	Not specified
II	NJ	7:27-16.6	Approved	(See Table 2, General Rule)	
III	PA		Under development		
IV	NC	.0944	Approved 5/1/85	(a) Polypropylene plants: reduce VOC emissions to 20 ppm or by 98%, whichever less stringent from reactor, decanter, neutralizer by-product and solvent recovery operation, dryer, and extrusion and pelletizing vents. (b) High density polyethylene plants: reduce VOC to 20 ppm or by 98%, whichever less stringent from ethylene recycle treater, dryer and continuous mixer vents. (c) Polystyrene plants: ≤0.24 lb/ton product from product devolatizer system. (d) Flares must have ≤5 minutes visible emissions per 2 hr period, have flame present, have the stated net heating value and exit velocity. Such a flare is assumed to achieve 98% destruction.	Not specified
V	IL		Under development		
V	MI		Under development		
V	OH	3745-21-09	Approval pending	≤0.12 lb VOC/1000 lb polystyrene resin produced.	Not specified
VI	LA	22.3	Approval pending	(a) For polypropylene and high density polyethylene processes as described, operations commencing construction < 1/1/85, burn nonhalogenated hydrocarbons at 1300°F for ≥0.3 seconds in a direct-flame afterburner or equivalent. (b) For polypropylene and high density polyethylene processes as described, operations commencing construction ≥1/1/85, burn nonhalogenated hydrocarbons at 1600°F for ≥0.5 second in a direct-flame afterburner thermal incinerator or other device achieving ≥98% destruction and removal efficiency or emissions of 20 ppm, whichever less stringent. (c) For polystyrene plants as described, ≤0.12 kg VOC/1000 kg product. (d) Halogenated hydrocarbons may be combusted by other approved methods.	(a) Waste gas stream <100 tpy. (b) Waste stream will not support combustion without auxiliary fuel. (c) Disposal cannot be accomplished practically or safely. (d) Safety relief and vapor blowdown systems where control is not safe or economically feasible.

Test Procedure	Averaging Time	Recordkeeping	Comments
In accordance with [22a-174-20(y)(6)] measured as organic carbon per quantity of polystyrene produced. Production rate determined from plant records.	Not specified	Monitor control equipment operating parameters as listed in (7)(A). Maintain records for 2 years.	Polystyrene resin sources only.
In accordance with Test Methods 2 and 25 of 40 CFR 60 Appendix A or approved equivalent.	Not specified	(a) Periodic reports at department request [310 CMR7.14(1)]. (b) The State adopted implementation guidance, developed for the regulation, that sets forth the requirements for "Reporting and Recordkeeping" and "Compliance Testing and Monitoring."	Polystyrene resin sources only.
(a) Operate monitoring equipment to show flare meeting specifications. (b) EPA RM 25, 25A, or 25B.	Not specified	Records as required by 0.0903.	Applies to manufacturer.
			Polystyrene sources only.
			Polystyrene source only. Michigan's only source is in a rural nonattainment area.
Not specified	Not specified	Not specified	Polystyrene sources only.
			(a) Contained in waste gas disposal regulation. Applies to liquid phase processes as described. (b) Includes process unit upsets, startups, and shutdowns. (c) Recodification of LA regs in processs.

SOURCE CATEGORY: Manufacture of High Density Polyethylene, Polypropylene, Polystyrene Resins (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	TX	115.161 through 115.164	Under development		
VII	MO (St. Louis)	10 CSR 10-5.410	Under development		
IX	CA (BA)	8-36-100	Approved	(a) Total emissions of precursor organic compounds from resin reactor, thinning tanks, and blending tanks must be either abated by ≥95%, or by ≤10 lb/day.	Not specified
IX	CA (SC)	1141	Approved	(a) Total emissions of reactive organic gases from organic resin reactor, thinning tank, and blending tank vents reduced to 0.5 lb/1,000 lb of completed resin produced or by 95% or more.	<10 lbs of reactive organic gases per day from all equipment subject to rule.

Test Procedure	Averaging Time	Recordkeeping	Comments
			See General Rule: regulations are subject to change.
			(a) Applies to manufacture of polystyrene only. (b) Applies to South St. Louis area.
As prescribed in the Manual of Procedures, Volume IV, ST-7	Not specified	Not specified	Compliance by 1/1/86.
Not specified	Not specified	Not specified	Manufacturer to submit test data or theoretical calculations to show compliance with limits or exemption.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.6(g)	Approval pending	(a) No leaks from flange gaskets, manhole gaskets, measuring instrument connections, sight glass connections, and other sealed connections, joints, and fittings not involving moving parts. (b) No leaks from valve bonnets, pump packings, compressor packings and other seals surrounding moving parts if emit >10,000 ppm (VOC) as measured 0.4 in. from source or if emissions are in liquid state. (c) Test pumps, valves, compressors, and pressure relief valves quarterly. (d) Visually inspect pumps weekly. (e) Test relief valves ≤5 days after venting to atmosphere. (f) Test repaired equipment immediately after repair. (g) Repair leaks within 15 days unless shutdown necessary. (h) After 7/1/87, no valves at the end of a pipe or line containing VOC unless sealed with second valve, blind flange, plug, or cap.	(a) Equipment in contact with substance <1% (wt) VOC. (b) Pressure relief valves connected to operational flare, vapor recovery device, storage tank valves, to non-externally regulated valves, or to valves in vacuum service. (c) For limit (h), safety pressure relief valves. (d) Valves that would require monitoring pressure to be higher than 6.6 ft above permanent support surfaces may be monitored annually.
V	MI		Under development		
VI	LA	22.21	Approval pending	(a) No leaks >10,000 ppmv. (b) No valves at the end of a pipe or line containing VOC unless sealed with second valve, blind flange, plug, or cap. (c) Reasonable effort to repair leaks within 15 days. (d) Visually monitor pump and compressor seals weekly. (e) With leak detection device, monitor quarterly pumps, valves, pressure relief valves in gas service. (f) After pressure relief valve vents, make immediate visual evaluation; monitor within 24 hours. (g) With leak detection device, monitor immediately any component leaking perceptibly.	(a) For limit (b), safety pressure relief valves, valves on sample lines, valves on drain lines, and valves that can be removed and replaced without shutdown. (b) Repair delay permitted if component can be temporarily bypassed; if process shutdown required and shutdown generate more emissions than repair eliminate. (c) Monitoring not required for components contacting fluid of <10% VOC, ≤0.147 psig, or compounds exempted under 22.10; pipeline flanges, inaccessible valves, valves unsafe to monitor, check valves; pressure relief valves in liquid service, pressure relief devices, pump or packing and compressor seals or packing tied to flare header or vapor recovery device, equipment in vacuum service, pumps and compressors with double mechanical seals, R&D pilot facilities, and facilities with <100 valves in gas or liquid service. (d) Plants of <40 million cubic feet capacity that do not fractionate natural gas liquids. (e) May skip one quarterly leak detection period after two consecutive periods when ≤2% of valves leaking. (f) May monitor annually after 5 consecutive periods when <2% of valves leaking. Quarterly testing must resume if any test shows >2% valves leaking.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Department approved method [7:2716.9] (b) Initial emission test completed by 3/31/87.	Not specified	7:27-16.6(i) (a) After 4/1/87, maintain log of information on leaking components. (b) Retain for 5 years. (c) Log must contain name of unit where leak located, component type, tag ID number, date leak detected, repaired, and retested, ID of problem repairs, and total number of components monitored and leaking. (d) Submit quarterly reports beginning 7/1/87 listing components detected leaking, but not repaired within 15 days, leaks awaiting process shutdown, and total number of leaking components.	(a) Affix identification tag to leaking component.
(a) EPA RM 21. (b) Monitor with leak detection device.		(a) Record percent of valves leaking each quarter. (b) Maintain survey log as described. (c) Retain for 2 years. (d) Submit quarterly report as described.	(a) Recodification of reys in progress.

SOURCE CATEGORY: Natural Gas/Gas Processing (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	TX		Under development		
IX	CA (BA)	8-37-100	Approved	(a) Leak of POC >10,000 ppm above background from valve flange, or choke, shall be repaired ≤15 days. (b) No liquid pools of crude oil or condensate in the lease area. (c) No open vessels of crude material larger than 250 Ml in lease area, including well cellar. (d) Removal within 24 hours of detection, any spills of crude oil or condensate causing a liquid pool. (e) If leak of PO occurs >10,000 ppm above background from nonessential pump or compressor, shall be removed from service for repair ≤15 days. If spare also exceeds 10,000 ppm, repairs made ≤30 days, and spare pump may be used. (f) If repaired nonessential pump or compressor does not pass reinspection, remove from service ≤15 days; repair ≤30 days. (g) If repaired nonessential pump or compressor passes reinspection, no repairs or service removal required for 6 months. (h) Leak from essential pump or compressor with packed seal shall be minimized ≤15 days. (i) Essential pump or compressor that has had leak minimized and still exceeds 10,000 ppm shall be repaired at next scheduled maintenance or within 6 months. (j) Valve, flange, liquid line, or component with liquid leak >0.5 ml/h shall be repaired within 24 hours, and, if not successful, replaced ≤15 days. (k) No use of stuffing box where POC >10,000 ppm or where liquid leak >0.5 ml/h. (l) Clearly identify leaking parts as described.	(a) Inaccessible valves and flanges. (b) Natural gas distribution, transportation, and storage facilities. (c) Natural gas streams that contain ≥90% methane (vol.). (d) Liquid streams with >85% water (vol.). (e) For limit (a) leak in essential equipment must be minimized ≤15 days, and repaired at next scheduled maintenance, but before 6 months.
IX	CA (SC)	466, 466.1 and 467	Approved		

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	(a) Retain inspection records for 1 year. (b) Record inspection results, equipment awaiting repairs.	(a) Applies to natural gas and crude oil production facilities. (b) POC = precursor organic compound as defined.
			(a) Rules affecting natural gas/gas processing plants are found in three separate rules rather than in one single rule. These three rules are: 466-Pumps and Compressors; 466.1-Valves and Flanges; and 467-Pressure Relief Devices. Summaries of these rules are found in Table 3 under "Pumps and Compressors" for Rule 466 and under "Valves/Flanges of Chemical Plants" for Rules 466.1 and 467.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22a-174-20 (x)	Approval pending	No evidence of leakage from pumps, valves, compressors and safety relief valves in gas/vapor service or in light liquid service. Pumps-visually inspect those in light liquid service weekly. Repair within 15 days. All others-monitor at least once a quarter. Repair within 15 days. Safety/relief Valves-monitor after each overpressure relief. Open-ended valves-install a cap, blind flange, plug, or second closed valve.	(a) If 4 consecutive quarterly monitoring tests show <2% of valves leaking, valves may be monitored once/year during 3rd or 4th quarter. When any test shows >2% of valves leaking, quarterly monitoring must resume. (b) Less frequent monitoring to a minimum of 1 year allowed if source unsafe to monitor. (c) Situations where leakage impossible (vacuum). (d) Safety-relief valves isolated from process by frangible disc or rupture disc permitted annual monitoring. (e) Canned pumps complying with 40 CFR 60.482-2(e)(2) and 60.482-2(e)(3) are exempt from (x)(4) and (x)(b)(a). (f) Facilities exempted under 40 CFR 60.480(d).
I	MA	310 CMR7.18 (19)	Approval pending	(a) Monitor quarterly with organic detection instrument, pumps in light liquid service, compressors, valves in gas or light liquid service, pressure relief valves in gas service within 24 hours of venting to atmosphere. (b) Monitor within 24 hours if sight, smell, or sound indicate leakage. (c) Repair within 15 days of detection if sight, smell, or sound indicate leaks from any component, including flanges, connections, and equipment in heavy liquid service. Repair before next scheduled unit turnaround, if repair within 15 days impossible. (d) Affix a weatherproof, readily visible, tag to component within 1 hour of leak detection. Tag shall remain in place until repair completed. (e) Inspect weekly all pumps in light liquid service. (f) Except for pressure relief valves, seal all open-ended valves that are open to process fluid and the atmosphere. Seal with second valve, blind flange, cap, or plug. (g) Submit leak detection and repair program within 180 days and first quarterly report within 360 days of date regulation is effective.	Exemptions to quarterly monitoring possible upon approval as follows: (a) Yearly monitoring acceptable if components unsafe to monitor (b) For valves, if 5 consecutive quarterly monitoring tests show <2% of valves leaking, valves may be monitored annually during 4th quarter. When any test shows >2% of valves leaking, quarterly monitoring must resume. Cutoff possible upon approfor SOCMI facilities handling <980 tpy VOC.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Soap solution to detect VOC leaks by bubble formation during 3-minute period, or Hydrocarbon detector test for gaseous VOC's; concentration >10,000 ppm considered leakage. (b) Monitoring in accordance with EPA RM 21.	Not specified	Retain for 2 years. Records to include: a) identification of sources monitored, b) dates and results of inspection or monitoring, c) action taken, repair date and description, d) explanations for repair delay, e) test method, f) records of pumps found leaking.	Applies to leaks from SOCMI and polymer manufacturing equipment.
Use organic detection instrument in accordance with EPA RM 21.	Not specified	(a) For each leaking component: - Component type/chemical used in component - Identification tag number - Date leak detected - Date repair occurred/type of repair - Identification of leaks not repaired until unit turnaround and reasons for delay; date of next turnaround - Test methods - Inspection/monitoring results; results of weekly visual leak inspection - Responsible individual (b) Quarterly report including number and types of: components repaired, time elapsed before repair; leaking components not repaired within 15 days and reason.	(a) Notify Department 10 days prior to monitoring to permit operation observation if desired. (b) Applies to leaks from SOCMI and polymer manufacturing equipment.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.6(h)	Approval pending	(a) No leaks from flange gaskets, manhole gaskets, measuring instrument connections, sight glass connections, and other sealed connections, joints, and fittings not involving moving parts. (b) No leaks from valve bonnets, pump packings, compressor packings, and other seals surrounding moving parts if emit >10,000 ppm (vol) as measured 0.4 in. from source or if emissions are in liquid state. (c) Quarterly, test pumps in light liquid service, valves in gas or light liquid service, compressors and safety relief valves in gas service. (d) Weekly, inspect all pumps in light liquid service. (e) Test relief valves ≤5 days after venting to atmosphere. (f) Test repaired equipment immediately after repair. (g) Repair leaks within 15 days unless shutdown necessary. (h) After 7/1/87, no valves at the end of a pipe or line containing VOC unless sealed with second valve, blind flange, plug or cap.	(a) Equipment in contact with substance <10% (wt) VOC and that is used to produce ≤1,100 tpy SOCMI. (b) Pressure relief valves connected to operational flare, vapor recovery device, storage tank valves, non-externally regulated valves, or valves in vacuum service. (c) For limit (h), safety pressure relief valves. (d) Valves that would require monitoring personnel to be higher than 6.6 ft. above permanent support surfaces may be monitored annually.
II	NY Metro		Under development		
III	DE	XXIV(17)	Approval pending	(a) Develop and conduct monitoring program as described in 17.5(A). Modifications to a program will be considered for approval after complete inspection. (b) Record components leaking >10,000 ppm. Use tag to label and date leaks detected. (c) Repair and retest leaking components ≤15 days (first attempt within 5 days). (d) For pressure relief devices in gas vapor service: - emit <500 ppm above background - return to compliance ≤5 days after each pressure release - monitor ≤5 days after each relief. (e) Valves at end of pipe or line must be sealed with a second valve, a blind flange, a plug, or a cap.	(a) Pressure relief devices and compressors vented to operating flare header, vapor recovery device. (b) Valves not externally regulated. (c) For unit (c), reciprocating compressors. (d) For unit (d), pressure relief devics equipped with closed vent system capable of capturing and transporting leakage to control device.
III	PA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Department approved method. [7:27-16.9] (b) Complete initial test by 3/31/87.	Not specified	7:27-16.6(i) (a) After 4/1/87, maintain log of information on leaking components. (b) Retain for 5 yrs. (c) Log must contain name of unit where leak located, component type, tag ID number, date leak detected, repaired, and retested, ID of problem repairs, and total number of components monitored and leaking. (d) Submit quarterly reports beginning 7/1/87, testing components detected leaking, but not repaired within 15 days, leaks awaiting process shutdown and total number of leaking components.	(a) Regulation applies to SOCMI and polymer manufacturing facilities. (b) Affix identification tag to leaking component. (c) Compliance achieved by 7/1/87.
(a) In accordance with §60.485(b) and (c) of 40 CFR 60.	Not specified	(a) Maintain monitoring log of leaking components as specified. (b) Retain 2 years. (c) Submit reports as specified.	(a) Applies to companies in New Castle County. (b) Also applies to leaks from methyl tert-butyl ether, polyethylene, polypropylene, and polystyrene equipment.

SOURCE CATEGORY: SOCMI Fugitive Emissions (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IV	KY	401 KAR 61:175	Approval pending	(a) Repair leaks within 15 days. (b) Recheck component 5 days after repair. If leak still present, perform maintenance until VOC <10,000 ppmv. (c) Valve at end of pipe or line containing VOC shall be sealed with a second valve, blind flange, plug, or cap. (d) Quarterly, monitor with portable VOC device pumps in light liquid service, compressors, valves in light liquid or gas service, pressure relief valves in gas service. (e) Weekly, monitor visually pumps in light liquid service. (f) Monitor pressure relief valve within 5 days of venting. (g) Within 5 days, monitor with portable VOC device, any component perceptibly leaking by sight, smell, or sound. (h) Obviously mark location of pipeline valves and pressure relief valves for gas service. (i) Tag leaking components. Record subsequent monitoring and repair efforts as described.	(a) Components within petroleum refinery complex. (b) For limit (c), safety pressure relief valves. (c) Pressure relief devices ?? in to flare header or vapor recovery device. (d) Difficult or unsafe to monitor components that meet requirements of 40 CFR 60 (VV). (e) Unit processing only heavy liquid VOC. (f) Groups of affected facilities within process unit with design capacity of <1,000 Mg/yr of polyethylene, polypropylene, polystyrene, methyl tert-butyl ether, or ≥1 of SOCMI chemicals listed in 40 CFR 60 (VV). (g) Group of facilities manufacturing beverage alcohol.
IV	KY	6.39	Approval pending		
IV	NC	.0943	Approved 5/1/85	(a) No liquid VOC leakage. (b) <10,000 ppm gaseous VOC leakage from fugitive source. (c) Visually inspect pumps in light liquid service weekly. (d) Monitor quarterly any pump, valve, compressor, safety relief valve in gas/vapor or light liquid service. (e) On open-ended valve, install cap, blind flange, plug, or second closed valve. (f) Repair any leak within 15 days of detection.	(a) Annual monitoring in the 3rd quarter permitted if monitoring results from 4 consecutive quarters each show ≤2% of valves leaking. Resume quarterly monitoring after any quarter when >2% of valves are leaking. (b) If fugitive source unsafe to monitor, monitoring permitted annually when not operating under extreme conditions. (c) Annual monitoring permitted for source >12 ft above support surface. (d) If repair requires process shutdown, repair may be delayed to next turnaround.
V	IL		Under development		
V	MI		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 21	Not specified	Not specified	(a) Compliance by 7/1/88. (b) Applies to leaks from SOCMI and polymer manufacturing equipment. (c) Affected facilities are those contacting process fluid of >10% VOC by weight. (d) May request variation from monitoring requirements.
			(a) Applies to Jefferson County, KY (Louisville). (b) Adopts Federal regulation for new SOCMI facilities [40 CFR 60 (VV)] by reference. (c) Also applies to methyl tert-butyl ether, polyethylene, polypropylene, and polystrene.
EPA RM 21	Not specified	Maintain records including dates and results of inspection and monitoring; and actions taken, repairs made, and reasons for repair delays.	Applies to leaks from SOCMI and polymer manufacturing equipment.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
V	Ohio	3745-21-09 [DD]	Approval pending	(a) Monitor monthly pumps in light liquid service, and valves in gas/vapor or light liquid service. (b) After leak or potential detection, monitoring shall occur within 5 calendar days for pumps and valves in heavy liquid service, pressure relief devices in light or heavy liquid service, and flanges or other connectors. (c) Visually inspect pumps in light liquid service weekly. (d) Check sensors daily. (e) Follow leak detection protection procedures as described. (f) Repair ≤15 days using at least the best practices described. (g) Equip compressors with seal that has a barrier fluid system and sensor. (h) For pressure relief valves, ≤500 ppmv except during pressure release. Test within 5 days after a pressure release. (i) Equip sampling connection systems with closed purge or closed vent system as described. (j) Equip open-ended valve or line with cap, blind flange, plug, or second valve as described. (k) Equipment designed for no detectable emissions shall emit ≤500 ppmv. (l) Barrier fluid systems, closed vent systems shall meet requirements described. (m) Vapor recovery system ≥95% effective. Enclosed combustion device ≥95% effective or ≥0.75 sec. residence time at ≥1500°F. Flare operated as described.	(a) Quarterly monitoring permitted after 2 months where no leaks detected, beginning with next subsequent calendar quarter. Semi-annual monitoring permitted after ≤2% valves leaking for two consecutive quarters. Annual monitoring permitted after ≤2% valves leaking for five consecutive quarters. (b) For valves in light liquid or gas/vapor service monitoring annually permitted as described for difficult-to-monitor valves, monitoring as described permitted as often as safe and practical for unsafe to monitor valves. (c) Pumps exempted from monitoring rules if: have no externally actuated shaft penetrating pump housing and are designed for no detectable emissions; are equipped with dual mechanical seal with barrier fluid system and sensor; or are equipped with closed vent system to transport leaks to control device. (d) Valves exempted from monitoring rules if have no externally actuated shaft penetrating pump housing and are designed for no detectable emissions. (e) For limit (d), sensors with audible alarm. (f) Compressors and pressure relief valves exempt if have closed vent system to transport leaks to control device. (g) Reciprocating compressors exempt if were installed before effective date or compliance can only be achieved by replacing or recasting of compressor. (h) In-site sampling systems exempt from limit (i). (i) Process unit: <1100 tpy design capacity; producing heavy liquid chemicals from heavy liquid feed or raw materials; producing beverage alcohol; at petroleum refinery; not in VOC service. (j) Equipment in vacuum service; or subject to equivalent emission limit.

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 2 [3745-21-10(F)]	Not specified	(a) Maintain leak repair log as described. (b) Retain for 2 years. (c) Submit semi-annual reports as described by February 1 and August 1.	(a) Leak is ≥10,000 ppmv or liquid dripping from seal or sensor indication.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	LA	22.21	Approval pending	(a) No leaks >10,000 ppmv. (b) Valves at the end of a pipe or line containing VOC must be sealed with second valve, blind flange, plug, or cap. (c) Reasonable effort to repair leaks within 15 days. (d) Monitor annually pump seals, pipeline valves in liquid service, process drains. (e) Monitor quarterly compressor seals, pipeline valves in gas service, pressure relief valves in gas service. (f) Visually monitor pump seals weekly. (g) After pressure relief valve monitor within 24 hours. (h) Monitor immediately any component leaking perceptibly.	(a) For limit (b), safety pressure relief valves, valves on sample lines, valves on drain lines, and valves that can be removed and replaced without shutdown. (b) Repair delay permitted if component can be temporarily bypassed; if process shutdown required and shutdown generate more emissions than repair eliminates. (c) Monitoring not required for components contacting fluid of <10% VOC, ≤0.147 psig, or compounds exempted under 22.10; pipeline flanges, inaccessible valves, valves unable to monitor, check valves, pressure relief valves in liquid service, pressure relief devices, pump or packing and compressor seals or packing and compressor seals or packing tied to flare header or vapor recovery device equipment in vacuum service, pumps and compressors with double mechanical seals, R&D pilot facilities, and facilities with <100 valves in gas or liquid service. (d) May skip one quarterly leak detection period after two consecutive periods when ≤2% of valves leaking. (e) May monitor annually after 5 consecutive periods when <2% of valves leaking. Quarterly testing must resume if any test shows >2% valves leaking.
VI	TX	V§115.271	Approved	(a) No leaks >10,000 ppmv. (b) Reasonable effort to repair leaks ≤15 days. Tag components for which repair delayed. (c) Valves at end of pipe or line containing VOC must be sealed with second valve, blind flange, plug, or cap. (d) Clearly mark pipeline and pressure relief valves in gas service. (e) Measure yearly pump seals and pipeline valves in liquid service. (f) Measure quarterly compressor seals, pipeline and pressure relief valves in gas service. (g) Visually inspect pump seals weekly. (h) Measure: pump seal emissions if seal dripping and has vapor pressure >0.147 psia, relief valve that has vented in last 24 hours, and any component after repair.	(a) Repair may occur after subsequent shutdown if fewer emissions would result. (b) For limit (c), safety pressure relief valves. (c) Exempt from monitoring: pressure relief devices connected to operating flare header, components in continuous vacuum service, inaccessible valves, valves not externally regulated; pressure relief valves downstream of intact rupture disc; pumps in liquid service equipped with dual pump seals, barrier fluid system, seal degreasing vents, and vent control systems; compressors with degreasing vents and vent control systems. (d) Alternate monitoring schedule may be requested after 2 complete annual checks or 2 complete quarterly checks of pipeline valves in gaseous service. (e) Valves ≤2 in. if overall plant emissions exceed allowable by ≤5%. (f) Components contacting process fluid of <10% VOC or vapor pressure ≤0.147 psia (if components properly inspected visually).

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) EPA RM 21. (b) Monitor with leak detection device.	Not specified	(a) Record percent of valves leaking each quarter. (b) Maintain survey log as described. (c) Retain for 2 years. (d) Submit quarterly report as described.	(a) Recodification of regs in progress. (b) Applies to leaks from SOCMI and polymer manufacturing equipment.
(a) Leak detection equipment must have meter readout in ppmv hexane. (b) Monitor with hydrocarbon gas analyzer.	Not specified	(a) Maintain leaking components monitoring log as described. (b) Retain for 2 years.	(a) Applies to leaks from SOCMI and polymer manufacturing equipment.

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII MO (St. Louis)	10 CSR 10-5.420	Approval pending	(a) Repair leaking components ≤15 days; or if shutdown required, at next shutdown of ≤90 days, whichever comes first. (b) Equip open-ended valves or lines with cap, plug, or second valve. (c) Monitor quarterly pumps in light liquid service, compressors in gas service. (d) Monitor annually in April, valves in VOC service not externally regulated or difficult or unsafe to monitor. (e) Perform performance test on valves in VOC service annually in April, by monitoring and repairing any leaking. If >2% leaking, all valves in process unit shall be monitored quarterly until <2% are leaking. (f) Visually inspect pumps in light liquid service weekly. (g) Monitor safety and pressure relief valves after each venting.	(a) Units processing <980 tpy light liquid and gaseous VOC or producing no chemicals listed in 10 CSR 10-6.070. (b) Pumps with double mechanical seal including a barrier fluid system excempt if operated as described. (c) Safety/relief valves in series with rupture disk and spring return valve or any pressure relief device with closed vent system capable of capturing and transporting leakage to control device.
IX CA (BA)	8-22-100 8-25-100 8-28-100	Approved		
IX CA (SC)	466, 466.1 and 467	Approved		

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 21	Not specified	(a) Maintain records of monitoring results. (b) Retain for 2 years.	(a) Applies to South St. Louis area. (b) Component is in gas or light liquid VOC service if contacts gas or liquid of ≥10% VOC. (c) Light liquid is VOC with vapor pressure 70.31 kPa. (d) A leak is ≥10,000 ppmv ≤5 cm from source, or visual evidence of leak.
			See separate regs under pumps and compressors (8-25-100) and valves and flanges (8-22-100 and 8-28-100), which cover these components at petroleum refineries and chemical plants.
			See separate regs under pumps and compressors (466) and valves and flanges (466.1 and 467), which cover these components at petroleum refineries and chemical plants.

SOURCE CATEGORY: SOCMI Air Oxidation

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ		Under development		
III	DE		Under development		
IV	KY	6.38	Approval pending	(a) Reduce VOC's (minus methane and ethane) ≥98% or to 20 ppm by combustion device (whichever less stringent), or maintain TRE index value >1.0.	(a) Air oxidation facilities that use combustion device as of effective date of regulation, until device replaced or upgraded. (b) Facilities existing with construction permit before effective date of reg.
V	IL		Under development		
V	OH	3745-21-09 (EE)	Approval pending	(a) Vent process vent stream to combustion device ≥98% (wt) effective or emitting <20 ppmv. (b) Scrubber of ≥99% effectiveness for hydrogen chloride required for chlorinated VOC exhaust gases.	(a) Control devices constructed before effective date. (b) Total resource effectiveness >1 (calculation method provided).
VI	TX	115.161 through 115.164	Under development		
VII	MO (St. Louis)	10 CSR 10-5.400	Approved	(a) Achieve 70% removal efficiency for continuous removal of CO and 98% removal efficiency for continuous removal of VOC.	(a) Installations with potential to emit ≤1,000 tpy of CO or ≤100 tpy VOC from production of maleic anhydride.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) Jefferson County, Kentucky, regulation. (b) Compliance by 12/31/87. (c) Effective 12/17/86.
(a) To calculate total resource effectiveness, method for net heating value of a gas described in 3745-21-10(P)(2).	Not specified	Not specified	
			Part of general rule.
(a) For control device, EPA RM 25 [10 CSR 70-6.030(13)]. (b) For thermal oxidizer, compliance determined by exhaust gas temperature and residence time after test results establish the level of these parameters necessary to demonstrate compliance.	Not specified	(a) Maintain adequate records to determine removal efficiency. (b) Retain for 2 years.	(a) Applies to South St. Louis area. (b) Applies to control of emissions from production of maleic anhydride.

TABLE 4

SUMMARY OF GREATER THAN 100 TONS-PER-YEAR NON-CTG VOC REGULATIONS BY SOURCE CATEGORY

SOURCE CATEGORY: General Rule

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.6	Approved	(a) Limits emissions based on vapor pressure and percent VOC using Tables 4 and 5.	(a) Source gases in Range A or B discharged via a local exhaust ventilation system whose intake is located within 6 in. of discharge to internal work space if exhaust ventilation system collects >60% of Range A gas or ≥85% of Range B gas and is equipped with vapor control system that achieves ≥85 percent control on hourly basis.
II	NY	Part 212	Under development		
II	NYC Metro	Part 212	Under development		
III	MD	COMAR 10.18.06.06 (B)	Approved	(a) Installations or buildings constructed before 5/12/72, ≤200 lb VOC/day. (b) Installations or buildings constructed on or after 5/12/72 ≤20 lb/day.	Discharge is reduced by ≥85% overall.
IV	FL		Under development		
IV	GA	391-3-1(tt)	Approval pending	(a) Use RACT	(a) Facilities emitting ≤100 tpy VOC (b) Facilities subject to requirements of (t)-(ff), (hh)-(nn), and (pp)-(ss).
IV	NC	.0518	Approved 2/1/76; Amended 2/1/83; 7/1/79	(a) Stationary tank containing carbon and hydrogen must be capable of pressures to prevent vapor loss and must use either a floating pontoon, double deck type floating roof or internal pan type floating roof with closure seals; or a vapor recovery system that controls ≥90% (wt) organic emissions. (b) Loading of VOC into tank-truck, trailer, or railroad car must be submerged loading through boom loaders or approved equivalent. (c) Emit ≤40 lb/day of photochemically reactive solvent.	(a) Sources for which another VOC standard applies. (b) For Limit (a) tanks with capacity ≤50,000 gallons and containing substances other than carbon and hydrogen. (c) For limit (b), ≤20,000 gallons loaded per day. (d) For limit (c), reduction of emissions by 85%. (e) Facilities where BACT applied.
V	IL		Under development		
VI	TX	V§115.42 and §115.162 and §115.163	Approved	Burn vent gas stream properly ≥1300°F in smokeless flare or direct-flame incinerator or approved equivalent.	(a) Ethylene production from low-density polyethylene (see ethylene production rule). (b) Vent gas stream of ≤100 lb VOC per 24 hours. (c) Vent gas stream of ≥100 lb but <250 lb VOC per consecutive 24-hour period and having vapor pressure <0.44 psia.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	Applies to source operations other than storage tanks, transfers, open top tanks, surface cleaners, surface coaters, and graphic arts operations.
Those specified in Air Management Administration Technical Memorandum 83-05, "State Test Methods for Stationary Sources," June 1983 Revision 1. [10.18.01.04(c)]	Not specified	Not specified	
Not specified.	Not specified	Not specified	(a) Applies to Counties of Clayton, Cobb, Coweta, Dekalb, Douglas, Fayette, Fulton, Gwinnett, Henry, Paulding, and Rockdale.
(a) EPA RM 25, 25A, or 25B (b) EPA RM 21 for VOC leaks from organic process equipment.	Not specified	Not specified	(a) Applicable to VOC sources to which no other regulations apply.
Not specified	Not specified	Not specified	(a) General vent gas stream rule. (b) In all counties but Harris, only specific compounds and classes of compounds are listed and regulated under rule. In Harris County, any VOC is regulated. [115.163] (c) For §115.42, counties: Aransas, Bexar, Calhoun, Hardin, Matagoria, Montgomery, San Patricio, and Travis. (d) For §115.62, counties: Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Nueces, Orange, Tarrant, Victoria. (e) Approval is pending to include Dallas and Tarrant Counties under the applicability of §115.163, which currently covers only Harris County. One exception would be that the vapor pressure cut-off would be <0.009 psia (lower than that for Harris).

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirements	Exemptions/ Cutoffs
I	CT	22-174-20 (ee)	Approved 3/21/84	(a) Use RACT by 7/1/85, or by 12/31/87 if compliance plan submitted. (b) Use low-solvent coatings, adsorption, or equivalent [22-174-20-(bb)].	(a) Premises with actual VOC emissions <100 tpy. (b) Individual pieces of equipment with emissions <40 lb/day [22a-174-201(aa)].
I	MA	310 CMR 7.18 (17)	Approved	Use RACT by 12/31/83, or by 12/31/86 if compliance plan submitted by 12/31/82.	(a) Any facility specifically requested and required to reduce emissions by another section of 310 CMR 7.18. Note that if any individual part of facility regulated elsewhere is not regulated and emits more than 100 tpy VOC, this exemption does not apply to that part, but facility should consider bubble limitation (310 CMR 700, App. B). (b) Facilities with potential to emit VOC <100 tpy.
I	RI	15.5	Approved	(a) Use RACT by 18 months from effect of regulations. (b) Notify Director in order to receive a RACT determination.	(a) Facilities documenting satisfactorily that cannot economically and technologically meet RACT: must submit compliance plan 6 mos. before compliance date, provide schedule of progress, undergo RACT review every 2 2 years until achieved, and use RACT by no later than 12/31/86. (b) Facilities with actual VOC emissions <100 tpy.
II	NYC Metro	Part 212	Under development		
IV	TN	1200-3-18-.40	Approved 11/16/79.	(a) Use RACT.	(a) Facilities with actual VOC emissions <1,000 tpy.
V	OH		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Manner approved by the Commissioner. [22a-174-5(a)(b)(6)]		Retain for three years. [22a-174-5(a)(b)(6)]	RACT determinations are approved or are pending approval in Connecticut for: (a) Adhesives/gaskets (b) Charcoal mfg. (c) Helicopter painting/degreasing (d) Misc. automobile surface coating (e) Oil corrosion inhibitors (f) Plastics and polymer manufacturing (g) PVC foam products (h) Styrofoam mfg. (i) Thread coating
EPA RM 24 and 25 or approved equivalent [310 CMR 7.18(2)(e)].		Periodic reports at Department request [310 CMR 7.14(1)]	Any approved RACT application becomes part of SIP. Determinations pending approval for: (a) Boat mfg./coating (b) Chemical mfg. (c) Fabric printing (d) Fluorescent lights (e) Golf balls (f) Transformer coating
			(a) Any facility that becomes a 100 tpy VOC source must use RACT within 18 mos. (b) RACT determinations are approved or are pending approval in Rhode Island for: (a) Staple and nail manufacturing (b) Plastic parts coating
			(a) Applies only in Metropolitan Davidson County.

SOURCE CATEGORY: Adhesives-Aerospace

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	MD		Under development.		

Test Procedure	Averaging Time	Recordkeeping	Comments
			Application regulation.

SOURCE CATEGORY: Adhesives/Deadners

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	MD		Under development		
VII	MO (KC)	10 CSR 10-2.310	Under development		
VII	MO (St. L)	10 CSR 10-5.370	Under development		
IX	CA (SC)	1145	Approved	(a) <2.1 lbs VOC/gal coating as applied, excluding water, to plastics, rubber, and glass. (b) Equivalent emission control plan (bubble) permissible as described.	

Test Procedure	Averaging Time	Recordkeeping	Comments
			Application regulation.
			(a) Applies to Kansas City area.
			(a) Applies to South St. Louis area as described. (b) Includes regulation for laminated counter-top adhesive.
VOC content of coatings determined pursuant to Rule 107.	Not specified	Not specified	(a) Coating operations subject to this rule shall comply with Rule 442 until compliance with this rule achieved. (b) Coatings exempt from this rule shall comply with Rule 442.

SOURCE CATEGORY: Adhesives Manufacturing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	MD		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
V	WI		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII	MO (KC)		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Airplane Refueling Areas

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	NV	52.9	Approved	Affected facility in airplane refueling areas must be equipped with a system capable of recovering the vapors displaced during the filling of the gasoline storage tanks.	None

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	

SOURCE CATEGORY: Architectural Coatings

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22-174-20 (a)	Approved	(a) After 1/1/74, may not sell or offer for sale, architectural coating or solvent for thinning containing photochemically reactive solvents. (b) After 1/1/75, may not use, evaporate, dry, thin, dilute architectural coating containing photochemically reactive solvent.	(a) Container holding ≤1 quart (b) Applications for which Commissioner determines no photochemically reactive solvents are available, provided NAAQS still can be met. [22-174-20(h)]
II	NJ		Under development		
II	NYC Metro		Under development		
III	D.C.		Under development		
III	MD		Under development		
VI	OK	3.7.3	Approved		
VI	TX		Under development		
IX	CA (BA)	8-3-100	Approved	(a) Architectural coatings manufactured before 9/1/86, contain <250 g VOC per liter coating applied. Non-flat coatings contain ≤380 g/l. (b) Manufactured after 9/1/86, contain ≤250 g VOC/l coating. (c) Bituminous pavement seal manufactured after 9/2/79 must be of emulsion type. (d) Lists do not exceed specific limitations set in Section 8-3-304 for group of specialty coatings. (e) All coatings must display date of manufacture. (f) Coating containers must display recommendations for thinning so as not to exceed standard.	(a) Coatings sold for shipment or use outside District or for shipment to other manufacturers for reformulation and/or repackaging. (b) Coatings recommended solely for use as millunite coating, fire retardent coating, tile-like glaze coating, metailic piymented paints, swimming pool paint, multicolored coatings, quick dry primers and sealers, shellacs, graphic arts coating, bond breakers, below-ground wood preservative. (c) Section 8-3-302 [limit (b)], shall not apply to qualified small businesses. (d) Coatings supplied in containers ≤1.1 qt. (e) Sections 8-3-301 and 302 [limits (b) and (c)] shall not apply to coatings that comply with §8-3-304 [limit d]. (f) Any coating not listed in limit (d).

Test Procedure	Averaging Time	Recordkeeping	Comments
Manner approved by the Commissioner [22a-174-5(a)(b)(6)]		Retain for 3 years. [22a-174-4(c)(2)]	
			Covered under surface coating regulation for aerospace.
(a) Compliance of air-dried, water-based reduceable coatings: "Manual of Procedures," Volume III, Method 21. (b) Compliance of air-dried solvent-based "Manual of Procedures," Volume III, Method 22. (c) Compliance of non-flat coatings Federal Test Method Standard No. 141A, Method 6101.	Not specified	Not specified	

SOURCE CATEGORY: Architectural Coatings (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (SD)	67.0	Approved	(a) Do not sell, offer for sale, or apply, coating with >250 gm VOC/l coating or that is recommended for use as a bituminous coating used as a pavement sealer (unless emulsion type). (b) Do not sell, offer for sale, or apply non-flat coating with >380 gm VOC/l if manufactured between 9/2/79 and 9/1/85 or with >250 gm VOC/l if manufactured on or after 9/1/85. (c) All containers must display date of manufacture, and must carry recommendation regarding thinning of coating, as of 3/2/84. (d) Do not exceed specific limitations for coatings listed in (d)(6) of rule.	(a) Architectural coating manufactured before 9/2/79. (b) Coatings sold in San Diego County for shipment outside of County or to other manufacturers for repackaging for sale and use outside of County. (c) Coatings in containers ≤1 liter. (d) Coatings recommended by manufacturer for use as: below-ground wood preservative coating, bond breaker, fire retardant coating, graphic arts coating, mastic texture coating, metallic pigmented coating, quick-dry primer sealer and undercoater, shellac, swimming pool coating tile-like glaze coating. (e) Coatings manufactured by small business and defined before 3/1/84 if coating contains ≤450 gm VOC/l.
IX	CA (SC)	1113	Approved 7/10/84	(a) Do not sell, offer for sale, or apply coating manufactured after 12/31/81: - contains >250 gm/l VOC - contains >380 gm/l, is a non-flat coating manufactured before 9/2/85 - contains >450 gm/l is a non-flat coating manufactured by a small business, as defined, before 3/2/84 - is recommended for use as a bituminous pavement sealer (unless it is emulsion type). (b) Do not exceed limitations for specialty coatings listed in (a)(2) of rule. (c) Display date of coating manufacture and instructions as to thinning (coatings manufactured after 1/1/85). (d) No photochemically reactive solvent in containers ≥1 quart (except coatings in compliance with limits (a)(d)). (e) No thinning with photochemically reactive solvents except as permitted by limits (a)-(d).	(a) Coatings sold in District for shipment outside of District or to other manufacturers for repackaging. (b) Containers of coating <1 liter. (c) Coatings recommended solely for use as fire retardant, tile-like glaze, mastic texture, metallic pigmented coating, swimming pool paint, multi-color paints, quick-dry primers, sealers, undercoaters, shellac, sign coatings, bond breakers, below-ground wood preservative coatings.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	To maintain exemption, file annual report of quantity of described coatings sold in either San Diego or State of California.	(a) Rule 66 does not apply to sale or application of coatings subject to this rule or exempted by rule.
		(a) To maintain small business exemption, file annual request containing data including volume coatings sold. (b) To maintain exemption due to use of specialty or exempt coating, file annual report.	

SOURCE CATEGORY: Asphaltic Pitch - Roof Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
X	OR	340-22-190(1)	Approved	(a) After 4/1/80, containing gas-entrained effluents from equipment by close-fitting covers. (b) Maintain temperature of asphaltic or coal tar pitch below 550°F, or 30°F below flashpoint, whichever is lower.	(a) Equipment ≤26 gal. capacity. (b) Equipment ≤159 gal. capacity with tightly-fitted lid or cover.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	Applies to: (a) Equipment for melting, heating, or holding asphalt or coal tar pitch for the on-site construction, installation, or repair of roofs. (b) Compliance by 4/1/80.

SOURCE CATEGORY: Auto Refinishing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ		Under development		
II	NYC Metro		Under development		
VI	TX		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
			(a) Proposing to include auto refinishing under applicability of §115.191; it is currently listed as an exempted source.

SOURCE CATEGORY: Bakeries

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT		Under development		
IX	CA (BA)		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Bubbles

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/Cutoffs
I	CT	22-174-20 (cc)	Approved	Must achieve same net emission reduction as would be achieved if each source met emission limits in CT regulations.	Not specified
I	MA	310 CMR 700, Appendix B	Approval pending	(a) Owner of one or of two or more facilities may propose bubble. (b) A revised bubble application must be submitted after any new or more restrictive emission limitation has become applicable to any facility covered in a bubble. (c) Total emissions must equal emissions from sum of individual VOC emission limits. (d) Multifacility bubbles are required to show an additional 5 percent VOC reduction for bubble for each 10 miles of straight line distance between two farthest-apart facilities.	Not specified
I	RI	15.4	Approved	a) A facility with more than one VOC installation may propose bubble. b) May incorporate unregulated VOC sources.	Not specified
II	NJ	7:27-16.6(c) and 7:27-16.5(a)(2)	Approved Approval pending	(a) Where surface coating line in bubble, maximum hourly emission rate for that line to be determined by the following equation: $\frac{[1-y/d]}{[1-x/d]}(z)(x)$ where: x = maximum allowable emissions, lb/gal d = density of VOC of surface coating, lb/gal y = VOC content of surface coating, lb/gal z = volume of coating applied, gal/hr (b) Maximum emission rate = sum of individual emission rates. (c) All source operations under control or operated by 1 person. (d) Include only active source operations. (e) Calculations based on uninterrupted operation at normal production rate.	(a) Source gas streams >19.5% VOC (vol) and greater than 1,000 lb/hr.

Test Procedure	Averaging Time	Recordkeeping	Comments
Approved material balance or acceptable emission test.	Not specified	Not specified	Can be used for sources subject to subsections (m)-(v) inclusive and (ee). (Groups I & II CTG and RACT)
(a) To confirm reductions, Department may require facility tests or other measurements. (b) EPA RM 24 and 25 or approved equivalent [310 CMR 7.18(2)(3)]	(a) Either a 24-hour or calendar month averaging period. (b) Calendar month averaging period application must demonstrate need for such, and must contain maximum lb VOC per day limit.	Must submit reports demonstrating bubble requirements being met. Department determines report form and schedule.	(a) May never result in violation of NAAQS, or where applicable, of NSPS NESHAP, LAER, or BACT. (b) Hazardous pollutant emissions may never increase in exchange for emissions of non-hazardous contaminants. (c) Only facilities in compliance with all regulations may apply for bubble. (d) Quantifiable reductions in fugitive emissions beyond what is required by RACT may be used in a bubble.
Not specified	May be installation specific or be expressed as a facility-wide daily weighted average	(a) Daily records to demonstrate entire facility compliance. (b) Retain for 3 years.	(a) May never result in violation of BACT, LAER, NSPS, NESHAP's. (b) Review of bubble by Department occurs every 3 years from date of issuance. (c) Emission reduction credits must be calculated on a solids applied basis. (d) Nonhazardous VOC emission reduction credits cannot be used to increase emissions of hazardous VOC. (e) If unregulated source included in bubble, must either define RACT and only take credit for reductions achieved beyond RACT, or give full credit, but make equivalent RACT emission reductions at any 3-year review following regulation of source to RACT.
Department approved method [7:27-16.9].	Not specified	Not specified	(a) Application for approval must include identification and vapor pressure of VOC concentration and emission rate of VOC, and volumetric discharge flow rate and temperature of each source gas. (b) Emissions from NSPS or LAER source may not exceed respective limits. (c) Emission reductions below allowable may not be used for both emission offset credit and bubble emission limit achievement. (d) NESHAP emissions can not be included in bubble.

SOURCE CATEGORY: Bubbles (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NY	228.3 (c) 234.3 (b)	Approval pending	(a) For a surface coating facility or a graphic arts facility, a bubble may be used for only those processes covered by the provisions of Part 228 (for surface coating) or Part 234 (for graphic arts) in which emissions are reduced to a level that would be allowed if surface coatings complying with the limits specified for the coating operations identified in Tables 1 and 2 of Sections 228.7 and 228.8 or for graphic arts operations identified in Part 234 are used provided that: (i) total emissions from the facility do not exceed the mathematical sum of emissions that would be allowed from individual emission points; (ii) no interchange of two or more categories of air contaminants occur or in the case of VOCs no interchange of compounds exempted by Section 228.6 with applicable compounds occur; and (iii) explicit alternate emission limits for each emission point are provided in the facility-wide emission reduction plan.	Not specified
II	NYC Metro	228.3 (a) 234.3 (b)	Approval pending	(see NY above)	
III	PA	§128	Approved	Proposal for bubble submitted in plan approval application to Department.	Not specified
VI	LA		Under development		
VII	MO (St. L. and KC)	10 CSR 10-6.100	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) Facility must be in compliance with all other parts of the Subchapter. (b) The facility-wide emission reduction plan can not include emissions of hazardous air pollutants regulated by Part 61 of title 40 CFR or standards of performance by Part 60 of title 40 CFR.
Not specified	Not specified	Not specified	(a) Alternative emission requirements approved for any source are published in this chapter (§128).
			(a) Applies to all ozone nonattainment areas of the State.

SOURCE CATEGORY: Cleanup solvents

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	OK	3.7.3(b)	Approved	(a) Emissions that are from solvent used for cleanup of any equipment used in applying coatings and that are regulated under 3.7.3(a) shall be included in coating line total emissions calculations.	Not specified
VI	TX	115.191(9)(c)	Approved	(a) Coating line total emissions calculations shall include all VOC emissions that are from solvent used in coating operations, to include preparation of surfaces to be coated and cleanup of equipment used in applying coatings, and that are regulated under §115.191(a).	(a) Solvent directed into containers that prevent evaporation into the atmosphere.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Part of organic solvent regulation.

SOURCE CATEGORY: Coatings and Inks Manufacture

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IV	AL	8.29	Approval pending	(See Paints and Resin Manufacturing)	
V	MI		Under development		
V	WI		Under development		
VII	MO (KC)	10 CSR 10-2.300	Approval pending	(See Paints and Resins Manufacturing)	
VII	MO (St.L)	10 CSR 10-5.390	Approved	(See Paints and Resins Manufacturing)	
IX	CA (BA)	8-35-100	Approved	(a) Cover all portable mixing vats with lids as described and cover all stationary mixing operations. (b) Minimize POC emissions from portable mixing vat cleaning. (c) Minimize POC emissions from cleaning of high speed dispersion mills, grinding mills, and roller mills. (d) Fully enclosed screens on grinding mills installed aafter 11/1/85. (e) ≤15 lb POC/day and ≤300 ppm total carbon/day from stationary vat unless emissions controlled ≥90%.	(a) Manufacturer producing <500 gal/day. (b) Equipment being used for water-based coatings and/or paste inks. (c) Vats ≤12 gal volume.
IX	CA (SC)	1141.1	Approved	(a) Cover portable mixing vats with lids as described and cover stationary mixing vats. (b) Minimize reactive organic gases when cleaning portable and stationary mixing vats, high speed dispersion mills, grinding mills, and roller mills. (c) Grinding mills installed after 1/1/85 shall have fully enclosed screens.	(a) Manufacturers of <500 gal/day, except recordkeeping. (b) For limit (a), equipment producing water-based coatings and/or paste inks. (c) For limits (a) and (b), equipment used to produce coating in vats ≤12 gallons.

Test Procedure	Averaging Time	Recordkeeping	Comments
			(a) Developing two rules - one for resins and one for paints.
			(a) Developing two rules - one for resins and one for paints.
"Manual of Procedures," Vol. III, Method 21.	Not specified	(a) Daily production records. (b) Retain for 1 year.	(a) Applies to mixing vats. (b) POC = precursor organic compounds.
Not specified	Not specified	(a) Submit description of methods and equipment used to achieve compliance, or to document exemption qualifications. (b) Maintain records for 1 year.	(a) Resin manufacturing.

SOURCE CATEGORY: Coke By-Products Plants

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IV	AL	8.26	Approval pending	(a) Vacuum service equipment controlled by closed vent system or other control equivalent to (d), (e), (f), and (g) below. (b) Mark all subject equipment with weatherproof tags. (c) Perceptible leaks repaired within 15 days. (d) Pumps in light liquid service: monitor quarterly, visually inspect weekly, and repair $\leq$15 days. (e) Valves in gas and light liquid service: monitor quarterly, repair $\leq$15 days. (f) Pressure relief valves in gas service: monitor quarterly, repair $\leq$15 days. (g) Open-ended valves: equip open-ended valves with cap, blind flange, plug, or second valve, except during fluid flow; close process fluid valve before second valve, allow no VOC emissions from purged process fluid. (h) Enclose and seal open settling tank used in separation of naphtha from final cooler acqueus effluent.	(a) For limit (e), where monitoring personnel must be >2m above support, and the valve has no external actuating mechanism in contact with the process fluid. (b) Repair delay allowed if process shutdown required, or leaking equipment removed from service, or if emissions from immediate valve repair greater than from delayed repair.
IV	AL	8.27	Approval pending	(a) Closed vent capture system. (b) Control device, $\geq$95% removal.	Not specified
IV	KY	61:140	Approved	(a) No more than an average of 25 seconds of visible emissions per charge (averaged over 5 consecutive charges) during charging cycle from specified equipment. (b) $\leq$5% charging ports and $\leq$10% standpipes on operating ovens exhibiting visible emissions. (c) $\leq$10% of total coke oven doors on a battery exhibiting visible emissions. (d) $\leq$20% opacity from coke oven combustion stack. (e) $\leq$0.03 lb particulate/ton coke pushed from control device; $\leq$20% opacity during pushing as described. (f) $\leq$20% opacity during quenching; <750 mg/l total dissolved solids in make-up water. (g) $\leq$95% lb equivalent SO_2 per million cubic feet coke oven gas produced.	Not specified
V	IL	215.500	Approval pending	(a) 85% emission reduction from tar decanter, light oil sump, light oil condenser/separator, and tar condensate sump. (b) Conduct leak detection program for components in light oil liquid service including weekly visual inspections, and identification of leaking components. (c) Repair within 21 days.	(a) Provisions of Subpart R (General VOC regulation) shall not apply to coke by-product recovery plants. (b) For leak inspection program, coke oven gas line components, operating flare headers or vapor recovery devices (including pressure relief valves) (c) Leak repair delay permitted where process shutdown necessary, or parts unavailable.
V	IN		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 21.	Not specified	(a) Maintain log for all subject components as described. (b) Retain 2 years. (c) Submit quarterly reports as described.	(a) Jefferson County, AL, regulation. (b) Applies to leaks from coke by-product recovery plant equipment. (c) A leak at an instrument reading of ≥10,000 ppm or an indication of drippage from the pump seal.
(a) Instrument reading <500 ppm above background. (b) Quarterly visual inspections.	Not specified	Not specified	(a) Jefferson County, AL, regulation. (b) Applies to coke by-product recovery plant coke oven gas bleeder.
(a) RM 9 for combustion stack opacity and pushing operations. (b) Method 209B from Standard Methods for the Evaluation of Water and Wastewater, 15th Ed., for total dissolved solids in make-up water. (c) Gas chromatograph separation and flame photometric or thermal conductivity detection for sulfur in coke oven gas. (d) Procedures to determine visible emissions as described.	Not specified	Not specified	
		(a) Maintain monitoring log as described. (b) Retain for two years. (c) Prior to the first day of May and August each year, submit statement attesting that all monitoring and repairs occurred.	(a) Comply with limit (a) by 12/31/86. (b) Comply with limits (b) + (c) by 12/31/85. (c) Has not been formally submitted to Region.

SOURCE CATEGORY: Consumer/Commercial Solvent Use

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ		Under development		
II	NYC Metro		Under development		
VI	TX		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ		Under development		
IX	NV	445.846(4)	Approved	(a) Facilities for dock loading must have submerged fillpipe or acceptable equivalent for control of emissions.	(a) Dock loading of products <1.5 psia vapor pressure.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	Part of general organic solvent and VOC rule.

SOURCE CATEGORY: Ethylene Production Plants and Plants Using Ethylene

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	DC	712	Approved	(a) ≤20 lb/24 hrs unless waste streams are properly burned at 1300°F for ≥0.3 seconds in a direct-flame afterburner, or that are removed by approved method of comparable efficiency.	Not specified
III	PA	129.65	Approved	(a) Gas stream burned ≥1300°F for ≥0.3 seconds. (b) Gas from vapor blowdown system must be burned by smokeless flares.	Not specified
IV	AL	6.10	Approved	(a) In Mobile County, must burn waste properly at 1300°F for >0.3 seconds in a direct-flame afterburner equipped with an indicating pyrometer or in a catalytic vapor incinerator with pyrometer.	(a) Sources with potential emission rate of <100 tpy [6.1.1(b)]]. (b) Sources used exclusively for chemical or physical analysis or determination of product quality, where emissions ≤363 kg/mo.
IV	KY	401 KAR 61: 040	Approved 6/6/79	(a) Waste gas stream - 1300°F for ≥0.3 secs in a direct-flame afterburner or equally effective catalytic vapor incinerator. (b) Pyrometer at operator's eye level for afterburner or incinerator.	Not specified
VI	OK	3.7.4(a)(1)	Approved	(a) Gas stream burned at 1300°F for ≥0.3 seconds in direct flame afterburner or catalytic vapor incinerator with pyrometer as described. Must reduce ethylene emissions by 98%.	Not specified
VI	TX	V§115.41 and V§115.161.	Approved	(a) <1.1 lb ethylene/1000 pounds low-density polyethylene plant product unless vent gas streams burned at >1300°F in a smokeless flare or direct-flame incinerator or approved equivalent.	Not specified

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Any source emitting $\geq$ 25 tpy of air pollutant shall maintain written records including emission data, and results, methods, and procedures of sampling [500.2]	Applies to both ethylene production plants and plants using ethylene as a raw material.
Not specified	Not specified	Not specified	Applies to ethylene production plants only.
Not specified	Not specified	Not specified	Applies to ethylene production plants only.
Not specified	Not specified	Not specified	(a) Priority I areas. (b) Applies to ethylene production plants only.
Not specified	Not specified	Not specified	(a) Contained in waste gas disposal regulation. (b) Applies to ethylene manufacturing plants only.
Not specified	Not specified	Not specified	(a) Applies only to plants producing low-density polyethylene. (b) For §115.41 Counties: Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, Travis. For §115.161, Counties: Brazoria, Dallas, El Paso, Galveston, Harris, Jefferson, Nueces, Orange, Tarrant, and Victoria.

SOURCE CATEGORY: General Regulation for Storage, Transfer, Disposal of VOC's

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.2 7:27-16.3 (Transfer)	Approved Approved	(a) Stationary tank must have control apparatus as described in Table 1-A of regulations (will be floating roof with either one or two seal envelope combinations). (b) Stationary tanks with external floating roof and vapor-mounted primary seal must have second seal-envelope combination. Total gap area of gaps >1/8 in. width between secondary seal and tank wall $\leq$1 in.^{2}/ft tank diameter. (c) Subject tanks shall be equipped by 12/31/86. (d) Department must be notified of and given opportunity to inspect. General Storage (e) Tanks constructed or installed on or after 12/17/79, that are required to have floating roofs shall use double seal floating roof or approved equivalent. (g) All openings in external floating roof must be covered when not in active use. Transfer Operations (g) Transfer must be made through submerged fill-pipe or approved equivalent. (h) No VOC's emitted to atmosphere during gasoline transfer if emissions are in liquid state or if concentration $\geq$100% LEL propane. (i) No transport of VOC in delivery vessel unless vapor tight except in emergencies, when gauging, or while venting through approved controls. (j) Storage tank receiving gasoline from delivery vessel must have controls as described. (k) Delivery vessel >2000 gallons into which gasoline loaded at gasoline loading facility must have controls as described.	(a) Transfer of VOC into marine delivery vessels. (b) For limit (a), <40,000 gallons maximum capacity. (c) For limit (b), $\leq$1.5 lb/in.^{2} vapor pressure and <40,000 gal. max. capacity. (d) For limit (f), emergency roof drains. (e) For limit (h), manufacturing process vessels installed before 12/17/79. (f) Transfer made to vessel <2,000 gallons total capacity.
III	D.C.	701	Approved	(a) Tank, reservoir, or other container storing gasoline or petroleum distillate must be a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with one of the vapor loss control devices in good working order and in operation as follows: (i) Vessel has a continuous secondary seal extending from the floating roof to the tank wall (a rim-mounted seal) or a closure or other device that controls VOCs with an effectiveness equal to or greater than the rim-mounted seal; (ii) No visible holes, tears, or other openings in the seal(s) or seal fabric; (iii) Seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and tank wall; (iv) For vapor mounted primary seals, the accumulated areas of gaps exceeding 1/8th inch in width between the secondary seal and tank wall shall not exceed 1 inch per foot of tank diameter; (v) All openings in external floating roofs, except for automatic bleeder vents, rim space vents, and leg sleeves, are to be equipped with covers, heals, or lids in the closed position except when the openings are in actual use and with projections into the tank that remain below the liquid surface at all times; (vi) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; (vii) Rim vents are set to open when the roof is being floated off the leg supports or at the manufacturer's recommended setting; and	(a) $\leq$ 40,000 gallons storage capacities. (b) Vessels storing waxy, heavy pour crude oil. (c) Vapor pressure of gasoline or petroleum distillate <1.5 psia. (d) Vessels with less than 420,000 gallon capacity and used to store produced crude oil and condensate prior to lease custody transfer. (e) Vessels containing a petroleum liquid with a true vapor pressure <4.0 psia and that are of welded construction and presently possess a metallic-type shoe, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other equivalent closure device. (f) Vessels that are of welded construction, equipped with a metallic-type shoe primary seal and have a secondary seal from the top of the shoe seal to the tank wall.

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9].	Not specified	Not specified	(a) Department must be notified of and given opportunity to inspect existing seal-envelope combination before second ones are installed. (b) Delivery vessels, other than railroad tank cars, used to store VOCs for >1 month are considered stationary storage tanks. (c) By 12/31/86 submerged fillpipes shall be permanently affixed to under ground storage tank of ≥2,000 gallons total capacity into which gasoline is transferred.
(a) The accumulated areas of gaps shall be determined by physically measuring the length and width of all gaps where a 1/8 inch uniform diameter probe passes freely between the seal and tank wall (without forcing or binding against the seal) and summing the areas of the individual gaps. (b) Owners or operators complying with this rule using a vapor recovery system shall demonstrate compliance by methods approved by the Mayor.	Not specified	(a) Owners subject to this rule must maintain records of the types of volatile petroleum liquids stored,the maximum true vapor pressure of the liquid stored, and the results of the inspections performed (b) Owners of a petroleum liquid storage vessel with an external floating roof exempted from this rule, but containing a petroleum liquid with a true vapor pressure >1.0 lbs/in^2 shall maintain records of the average monthly storage temperature, the type of liquid, and the maximum true vapor pressure for all petroleum liquids with a true vapor pressure for all petroleum liquids with a true vapor pressure >1 lbs/in^2. (c) Copies of all records are to be maintained for at least 2 years after the date the record was made. (d) Copies of all records shall be immediately made available upon request.	(a) Rule applies to petroleum storage vessels with external floating roofs. (b) Semi-annual inspections including visual inspections of the secondary seal gap are required. (c) Measurement of secondary seal gap when the floating roof is equipped with a vapor-mounted primary seal is required on an annual basis.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	DC (cont.)	701		(viii) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers that cover at least 90% of the area of the opening.	
IV	AL	6.3	Approved	(a) Vessel is a pressure tank or equipped with one of the following vapor loss control devices: (i) A permanent submerged fill pipe; (ii) A floating roof, consisting of a pontoon-type, double-deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure or seal or seals to close the space between the roof edge and tank wall; (iii) A vapor recovery system, consisting of a vapor gathering system capable of collecting VOC vapors and gases discharged and a vapor disposal system capable of processing such VOC vapors and gases so as to prevent their emission to the atmosphere and with all tank gauging and sampling devices gas-tight except when gauging or sampling is performed; (iv) Other equipment or means of equal efficiency for purposes of air pollution control.	(a) Vessels with $\leq$ 1,000 gallon capacity (b) Crude petroleum produced, separated, treated, or stored in the field.
IV	KY	401 KAR 61:050	Approved	(a) Floating roof, vapor recovery system, or equivalent for vessels with storage capacity >40,000 gallons and storing petroleum liquid with a true vapor pressure $\geq$ 1.5 psia but $\leq$11.1 psia. (b) Vapor recovery system or its equivalent for vessels with storage capacity >40,000 gallons and storing petroleum liquid with a true vapor pressure >11.1 psia. (c) A permanent submerged fillpipe for vessels with storage capacity >580 gallons and storing petroleum liquid with a true vapor pressure $\geq$1.5 psia. (d) If the storage vessel is an external floating roof tank with a storage capacity >40,000 gallons, it shall be retrofitted with a rim-mounted secondary seal if (i) The tank is a welded tank, the true vapor pressure of the contained liquid is >4.0 psia, and the primary seal is either a metallic-type shoe seal, a liquid-mounted foam seal, or a liquid-mounted liquid-filled type seal or any other closure device that can be demonstrated equivalent to the above primary seals. (ii) The tank is a riveted tank and the true vapor pressure of the contained liquid is $\geq$ 1.5 psia. (iii) The tank is a welded tank, the true vapor pressure of the contained liquid is $\geq$ 1.5 psia, and the primary seal is vapor mounted. If such primary seal closure device can be demonstrated equivalent to the primary seals, then the secondary seal is required when the vapor pressure is $\geq$ 4.0 psia. (e) There shall be no visible holes, tears, or other openings in the seal or any seal fabric. (f) All openings, except stub drains, shall be equipped with covers, lids, or seals such that: (i) The cover lid, or seal is in the closed position at all times except when in actual use; (ii) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and	(a) The following types of external floating roof tanks storing liquid petroleum are exempt: (i) External floating roof tanks having capacities less than 422,000 gallons used to store produced crude oil and condensate prior to custody transfer. (ii) A metallic-type shoe seal in a welded tank which has a secondary seal from the top of the shoe seal to the tank wall (a shoe-mounted secondary). (iii) External floating roof tanks storing waxy, heavy pour crudes. (iv) External floating roof tanks with a closure or other devices which can be demonstrated to the satisfaction of the valent to the seals required. (b) Does not apply to storage vessels located on a farm and used exclusively for storing petroleum liquids used by the farm.

SOURCE CATEGORY: General Regulation for Storage, Transfer, and Disposal of VOC's (continued)

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	
The true vapor pressure is determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid.	Not specified	When a liquid having a true vapor pressure greater than 1.0 psia is stored in an external floating roof tank with a capacity greater than 40,000 gallons not equipped with a secondary seal or approved alternative control technology, the owner or operator shall maintain a record of the average monthly storage temperature, the type of liquid, and the Reid vapor pressure of the liquid. The owner or operator shall retain the record for two (2) years after the date on which the record was made.	

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IV KY (cont.)	401 KAR 61:050		(iii) Rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. (g) External floating roof tanks subject to this regulation must meet the additional requirements: (i) The seals must be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall. (ii) The gap area of gaps exceeding 0.32 cm [one-eighth (1/8 in)] in width between the secondary seal and the tank wall shall not exceed 6.5 sq. cm./0.3 m of tank diameter (1.0 sq. in/ft). (iii) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves, are to provide a projection below the liquid surface. (h) Any emergency roof drain is to be provided with a slotted membrane fabric cover or equivalent that covers at least ninety (90) percent of the area of the opening.	
VI LA	22.3	Approved	(a) Tank, reservoir, or other container must be a pressure tank capable of maintaining working pressures sufficient at all times under normal operating conditions to prevent vapor or gas loss to the atmosphere or is designed and equipped with a submerged fill pipe and one or more of the following vapor loss control devices: (i) An internal floating roof consisting of a pontoon type roof, double deck type or internal floating cover which will rest or float on the surface of the liquid contents and is equipped with a closure seal to close the space between the roof edge and tank wall. All tank gauging or sampling devices shall be gas tight except when gauging or sampling is taking place. This control equipment shall not be permitted if the organic compounds have a vapor pressure of ≥ 11.0 pounds psia under actual storage conditions. (ii) An external floatingg roof consisting of a pontoon type roof, double deck type roof or external floating cover which will rest or float on the surface of the liquid contents and is equipped with a continuous secondary seal extending from the floating roof to the tank wall (a rim mounted secondary) if: - The tank is a welded tank, the vapor pressure of the contained liquid is ≥ 4.0 psi under storage conditions, and the primary seal is a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or any other closure device which can be demonstrated equivalent to the above primary seals. - The tank is a riveted tank, the contained liquid is a VOC at storage conditions, and the closure device is as described above. - The tank is a welded or riveted tank, the contained liquid is a VOC at storage conditions, and the primary seal is vapor mounted.	(a) Vessels with storage capacities ≤ 40,000 gallons. (b) External floating roof tanks having nominal storage capacities of 420,000 gallons or less used to store produced crude oil or condensate prior to lease custody transfer. (c) A metallic type shoe seal in a welded tank which has a secondary seal from the top of the shoe seal to the tank wall (a shoe mounted secondary). (d) External floating roof tanks storing waxy, heavy pour crudes. (e) External floating roof tanks with a closure or other devices installed which will control volatile organic compound emissions with an effectiveness equal to or greater than the seals required in this rule. (f) Existing storage tanks having a nominal storage capacity of 420,000 gallons or less of crude or condensate or to new crude or condensate tanks having a storage capacity of less than 420,000 gallons unless such new tanks are subject to 40 CFR Part 60 Subpart K and Ka. (g) Tanks greater than 420,000 gallons used in activities prior to lease custody transfer are exempt from the provisions of this rule unless such tanks are subject to 40 CFR Part 60 Subpart K and Ka, then those provisions apply. (h) Horizontal underground tanks used to store JP-4 jet fuels.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) The secondary seal gap area for vapor mounted primaries shall be determined by measuring the length and width of the gaps around the entire circumference of the secondary seal. Only gaps greater than or equal to 1/8 inch (0.32 cm) shall be used in computing the gap area. This gap check is not required on liquid mounted primaries. (b) Compliance with the provisions for holes, tears, or other openings in the seal(s) or seal fabric, and the intactness and uniformity of the seal closure devices may be determined by visual inspection. (c) Routine inspections shall be conducted at least annually. The secondary gap seal measurements shall be made annually at any tank level provided the roof is off its leg.	Not specified	Conditions not in compliance with the requirements for seal closure devices shall be recorded along with date(s) of repair. Records shall be maintained for two years.	Any crude or condensate storage tank in an oxidant non-attainment area emitting one hundred tons per year of more of volatile organic compounds shall control the emission as specified by this rule (Sec. 22.3.1).

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	LA (cont.)	22.3		An alternate seal or seals can be used in lieu of the primary and secondary seals required herein provided the resulting emission is not greater than that which would result if the primary and secondary seals were installed. This control equipment shall not be permitted if the organic compounds have a vapor pressure of $\geq$ 11.0 psia under actual storage conditions. (b) Seal closure devices shall: (i) have no visible holes, tears, or other openings in the seal(s) or seal(s) fabric; (ii) be intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall; and (iii) not have gap areas, of gaps exceeding 1/8 inch in width between the secondary seal and the tank wall, in excess of 1.0 in^2 per foot of tank diameter. (c) All openings in the external floating roof, except for automatic bleeder vents, rim space vent, and leg sleeves, are to provide a projection below the liquid surface. The openings must be equipped with cover, seal, or lid which must be in a closed position at all times except when the device is in actual use. (d) Automatic bleeder vents must be closed at all times except when the roof is floated off or landed on the roof leg supports. (e) Rim vents must be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. (f) Any emergency roof drain must be equipped with a slotted membrane fabric cover or equivalent cover that covers at least 90 percent of the opening.	
VI	OK	3.7.2(a) and (b) 3.7.5-4(b)(1)	Approved	For attainment areas: (a) Organic material storage tank $\geq$ gallons must be equipped with permanent submerged fill-pipe or organic material vapor-recovery system (b) Organic material storage tank >40,000 gallons must either: maintain pressures sufficient to prevent gas/vapor loss; or have a floating roof; a vapor recovery system; or approved equivalent. (c) Floating roof must be of pontoon type, internal floating cover or double-deck type roof as described. Vapor recovery system must be $\geq$85% effective. (d) Loading facilities with throughput >40,000 gal/day must have: vapor collection and disposal system or bottom loading with closed hatches; use of pnaumatic hydraulic or equivalent means to force vapor-tight seal when loading through hatches using a loading arm with vapor collecting adaptor; means to prevent drainage from loading device; vapor-tight connections for loading not using hatches; a vapor disposal system of $\geq$90% recovery or a variable vapor space tank, compressor, and fuel-gas system. (e) Loading facilities with throughput, $\leq$40,000 gal/day must use submerged fill (maintain 97% submerged factor). For nonattainment areas: (f) Tanks are to be pressure tanks capable of maintaining working pressures at all times to prevent organic vapor or gas loss to atmosphere or is equipped with one or more of the following vapor control devices: (i) A floating roof equipped with a closure seal(s);	For attainment areas: (a) Storage tank <400 gallons. (b) For limit (c), loading into trucks or trailers of $\leq$200 gallon capacity. For nonattainment areas: (c) Storage tanks $\leq$ 40,000 gallons capacity.

SOURCE CATEGORY: General Regulation for Storage, Transfer, and Disposal of VOC's (continued)

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) 3.7.2(a) and (b) apply to attainment areas. (b) 3.7.5-4(b)(1) applies to nonattainment areas. (c) Requirement (f)(i) is not appropriate if organic compounds stored have a vapor pressure $\geq$11.0 psia.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	OK (cont.)	3.7.2(a) and (b) 3.7.5-4(b)(1)		(ii) A vapor recovery system capable of collecting ≥90% by weight the uncontrolled VOC and vapor disposal system capable of processing such organic compounds so as to prevent their emission to the atmosphere. (iii) Other equivalent and approved equipment or methods. (g) All tank gauging and sampling devices are to be gas-tight except when gauging or sampling is occurring.	
VI	TX	115.11	Approved	(a) For storage tanks >1,000 gal., but ≤25,000 gal., submerged fillpipe or vapor recovery system for VOC >1.5 psia. (b) For storage tanks >25,000 gal.: - internal or external floating roof or vapor recovery system for VOC >1.5 psia. - Submerged fillpipe and vapor recovery system for VOC >11 psia. (c) Specific requirements for floating roofs exist. (d) Transfer of VOC >20,000 gal per day with ≥1.5 psia are to be equipped with a vapor recovery system.	(a) Tanks <1,000 gal. (b) Slotted sampling and gauge pipe on floating roofs. (c) Ships and barges all exempt from transfer control.
VIII	CO	Part 1, Reg. 7 (III)	Approved	(a) Maintain and operate all storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage system, support structure, and pressure relief valves to prevent detectable vapor loss. (Limit opening, actuation, or use to minimize vapor loss.) (b) Transfer to tank, container, or vehicle compartment with capacity >56 gal shall be made using submerged or bottom filling equipment that assures 9% submerged filling.	(a) Emissions from any source of methane or ethane. (b) Transfer regulation excludes petroleum distillates [see (7)(c)]. (c) For transfer, transfer to container with capacity ≤56 gallons.
IX	CA (BA)	8-5-100	Approved	(a) Submerged fillpipe or equivalent for tank ≥40,000 gals. (b) Pressure tank or vapor loss control device for stationary tank >40,000 gal. (c) Vapor loss control device may be: - floating roof with closure device, or pontoon type or double-deck cover that rest on liquid surface as described - vapor loss control device may be: fixed roof with internal floating cover as described - vapor recovery system constructed on or after 1/25/78 must be ≥95% effective; if constructed before 1/25/78, must be ≥90% effective. - any pressure vacuum valve must not leak >10,000 ppm (d) Design and operational criteria listed for: - closure device on floating roof - metallic shoe-seal - welded tank shell using metallic shoe seal - riveted tanks with metallic shoe seals. Riveted tanks must have equivalent vapor control to welded tanks - resilient-toroid seal. (e) Inspection requirements listed for primary seal envelope, secondary seals.	(a) Storage tanks with vapor pressure ≤1.5 psia. (b) Stationary tanks with capacity <260 gal. (c) Stationary storage tank installed prior to 1/4/67, not used for gasoline storage to internal combustion engine fuel tanks and of capacity <2,000 gal or an underground tank with offset fill line. (d) Storage tanks during cleaning, stock change repair, or contaminated stock removal if written approval received.
IX	CA (SD)	61	Approved	(a) One of the following vapor loss control devices: pressure tank, floating roof of pontoon type or double-deck type roof, or internal floating cover as described, vapor collection and disposal system as described, or approved equivalent. (b) Stationary tanks >5,000 feet from each other unless <2 tanks have <550 gal capacity, total output <2,000 gal/mo, where gasoline in one tank has octane rating >95 and in other tank has ≤95, and difference in octane rating is ≥4.	(a) VOC with <1.5 psia. (b) Container ≤550 gal or <2,000 gal/mo. output. (c) Container used exclusively as fuel source for wind machines used for agricultural purposes. (d) Containers installed on or before 6/30/72 if file compliance plan.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) Required only of floating roof tanks with no secondary seal.
Not specified	Not specified	Not specified	
(a) Method 13, "Manual of Procedures," Vol. III. (b) ST-4, "Manual of Procedures," Vol. IV.	Not specified	(a) After 7/1/79, reports on seal conditions and gap allowances of primary and secondary seals as described. (b) For limit (b), record of liquids stored in containers, and true vapor pressure ranges of liquids.	(a) §8-5-302 covered under small fixed-roof tanks.
Not specified	Not specified	Not specified	

SOURCE CATEGORY: General Regulation for Storage, Transfer, Disposal of VOC's (continued)

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX CA (SD) (cont.)	61			(e) Storage of perchloroethylene, 1,1,1-trichloroethane, propane, natural gas with vapor pressure $\geq$1.5 psia.
IX CA (SD)	61.1	Approved	(a) BACT on VOC tanks at bulk plants or bulk terminals (stationary tanks) unless equipped with floating roof or internal floating cover resting on surface of liquid contents and meeting described closure device design criteria [61.1].	(a) For Rule 61.1, subject to Rule 61.3 or installed before 11/15/79.
IX CA (SD)	61.2	Approved	(a) 90% vapors from transfer and vented prevented from atmospheric release. (b) No fugitive vapor leaks along vapor transfer path as described. (c) No fugitive liquid leaks along path through which VOC's transferred. (d) Control by 90% vapors from transfer of compounds not subject to this rule into tanks previously holding VOC. (e) After 12/31/84, 90% control from displacement or venting of vapors of compounds not subject to this rule into a saturator using a VOC.	(a) VOC of $\leq$3 psi Reid vapor pressure transferred to mobile transport tank <550 gal. (unless generates or displaces VOC vapors >3 psi). (c) Transfer to mobile transport tank from tank specified in Rule 11(i). (d) Bulk plant operations before 3/1/84 where throughput <5,000,000 gal/yr VOC or diesel.
IX CA (SD)	61.3	Approved	(a) Permanent submerged fill pipe and $\geq$95% control from transfer and venting of VOC from mobile transport tank to stationary storage tank.	(a) Tanks with capacity $\leq$550 gallons.
IX CA (SD)	61.7	Approved	No spillage of VOC from transfer or dispensing devices.	(a) Normal maintenance and repair.
IX CA (SD)	63	Approved	(a) When loading VOC, vapor collection and disposal system with displaced vapor and air vented to system so hydrocarbon emissions <0.1% (vol) during fuel transfer as described. (b) <0.9% (vol) for 90% vehicles fueled during vehicle fueling operations. (c) Prevent drainage from loading device when removed from loading point.	(a) For loading from loading facility into tank truck, trailer, railroad tank car, tanker, or stationary storage tank. (b) VOC with vapor pressure $\leq$1.5 psi. Tanks used exclusively as fuel source for wind machines used for agricultural purposes with >550 gal capacity or $\geq$2000 gal/mo input. (c) For loading into boat, motor vehicle, or aircraft fuel tank, capacity $\leq$5 gallons, or loading facility <550 gal or total output <2000 output or equipped with vapor collection and disposal system. (d) Storage vessels or loading facilities being installed on or before 6/30/72, if file compliance schedule as described. (For aircraft fuel tanks, 9/30/73.) (e) Loading of perchloroethylene, 1,1,1-trichloroethane, propane, and natural gas of <1.5 psia.

SOURCE CATEGORY: General Regulation for Storage, Transfer, and Disposal of VOC's (continued)

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) Rule 61.1 covers receiving and storing VOC at bulk plants and bulk terminals (b) For limit (a) BACT is maximum hydrocarbon vapor emission reduction achievable, determined case-by-case.
Not specified	Not specified	Not specified	(a) Rule 61.2 covers transfer of VOC into mobile transport tanks.
Not specified	Not specified	Not specified	(a) Rule 61.3 covers transfer of VOC into stationary storage tanks.
Not specified	Not specified	Not specified	
For limit (b) approved sample as described.	Not specified	Not specified	

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX CA (SC)	462	Approved	(a) Equip Class I and Class II facilities with vapor collection and disposal system or equivalent, so emissions are <0.65 lb/1,000 gal liquid transferred, for liquids with >1.5 psia. (b) Equip Class II and Class V facilities with vapor collection and disposal system to return displaced vapors to stationary storage container from delivery vessel when loading gasoline. As in Rule 461(a), control vapors by 90%. (c) Submerged or bottom fill for Class IV facilities. (d) No fugitive vapor or liquid leaks or excess organic liquid drainage during disconnects. (e) No overfill or fugitive or liquid leaks from loading devices. (f) Repair fugitive or liquid leaks ≤2 days; notify Director. (g) Valid certification of vapor integrity for transporting vessels. (h) Switch loading must be done as described.	
IX CA (SC)	463	Approved	(a) Stationary tank >39,630 gal must prevent organic vapor or gas loss and have one of following: - floating roof, pontoon or double deck type with closure seals as described in detail for metallic shoe-type seals, resilient-toroid-type seals, riveted tank shell metallic shoe-type seal, or approved equivalent - fixed roof with internal floating type cover with closure devices as described - vapor recovery system of efficiency ≥95% as described. (b) For floating roof, equip roof openings with cover, use slotted membrane fabric cover or equivalent on emergency roof drain. (c) No floating roof if vapor pressure >11 psi. (d) Stationary tank ≤39,630 gal: pressure vacuum valve or vapor loss control device.	(a) Liquids with vapor pressure <1.5 psi. (b) Tanks ≤2,000 gal installed and in service before 1/9 or ≤251 gal installed on or after 1/9/76.
IX NV	445.346	Approved	(a) Process, store, use, and transport solvents or other volatile compounds to minimize evaporation, leakage, or other atmospheric discharge. If control available and feasible, use is mandatory. (b) No loss to atmosphere or use of one of the following for any new stationary tank >40,000 gallons and >1.5 psi: - floating roof, pontoon or double-deck roof type as described - approved equivalent. (c) Submerged fillpipe or equivalent on any tank constructed or remodeled after 11/7/75.	(a) Tanks ≤40,000 gallons.

Test Procedure	Averaging Time	Recordkeeping	Comments
Pressure delay method as described to assess vapor leaks from dome covers, pressure vacuum vents or other potential sources.	Not specified	Not specified	(a) Applies to organic liquid loading. (b) Facilities divided into 5 classes based on size and date of operation. (c) Rule specifies responsibility for compliance with limits.
(a) Emissions test may be required for closure seal.	Not specified	(a) Records of liquids stored in containers and their vapor pressures.	(a) Applies to storage of organic liquids.
Not specified	Not specified	Not specified	

SOURCE CATEGORY: Graphic Arts - Foil

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	VA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Graphic Arts - Litho

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III MD	COMAR 10.18.06.06 (B)	Approved	(a) Installations or buildings constructed before 5/12/72, $\leq$200 lb VOC/day. (b) Installations or buildings constructed on or after 5/12/72, $\leq$20 lb/day.	Discharge reduced by $\geq$85% overall.
VII MO (KC)	10 CSR 10-2.290	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Those specified in Air Management Administration Technical Memorandum 83-05 "State Test Methods for Stationary Sources" June 1983 Revision 1. [10.18.01.04(C)]	None specified	None specified	Graphic arts-Litho is covered under the general rule in Maryland.

SOURCE CATEGORY: Heat Set Web-Offset

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
V	IL		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Industrial Maintenance Coatings

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	OK	3.7.3 (a)	Approved		
IX	CA (BA)	8-3-100	Approved		
IX	CA (SD)	67.0	Approved		
IX	CA (SC)	1113	Approved		

Test Procedure	Averaging Time	Recordkeeping	Comments
			Regulated under general surface coating rule - see Surface Coating-Aerospace.
			Regulated under architectural coatings rule.
			Regulated under architectural coatings rule.
			Regulated under architectural coatings rule.

SOURCE CATEGORY: Laminated Counter Tops

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IV	AL	8.28	Approval pending	(a) ≤0.5 lb/VOC gal. adhesive, minus water as delivered to application system.	(a) Facilities emitting ≤100 tpy VOC

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Certification of adhesive composition by manufacturer (supported by batch formulation records).	Not specified.	Not specified.	(a) Jefferson County, AL, regulation. (b) Applies to manufacture of counter and cabinet tops by bonding decorative laminates to wood, particleboard, composition board, or similar materials.

SOURCE CATEGORY: Marine Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
V	IN		Under development		
IX	CA (SC)		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	VA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Nylon Fibers Manufacturing

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III VA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22-174-20 (f)	Approved	(a) ≤40 lb/day and ≤8 lb/hr organic material from any machine where organic solvent contacts flame or is baked, heat-cured, or heat polymerized in the presence of oxygen. (b) ≤40 lb/day and ≤8 lb/hr organic material from any machine used to apply photochemically reactive solvents. (c) After 6/1/73, ≤800 lb/day and ≤160 lb/hr of organic material from machine in which non-photochemically reactive organic solvent used or applied. (d) Includes cleanup solvents. (e) Must achieve through use of incineration, adsorption, or equivalent. (f) Provide, install, maintain devices/procedures showing proper operation of control device (temp., pressure, flow rate, etc.).	(a) Discharge reduced ≥85 percent. (b) For requirements (b) and (c) emissions from baking, heat-curing, heat polymerization. (c) Spraying of insecticides, pesticides, herbicides (d) CO, CO_2, carbonic acid, metallic carbides, metallic carbonates, ammonia carbo-onate (e) Materials boiling at >220°F at 0.5 mmHg unless used at >220°F. (f) Equipment regulated by CT Regs 22-174-20 (l)-(e) and (m)-(v). (g) Coating operations where solvent contains ≤20 percent organic by weight.
I	RI	15.2 and 15.3	Approved	(a) ≤40 lbs VOC/day from any machine or ≤100 lb VOC/day from any facility or facilities where highly photochemically reactive solvent is used, applied, evaporated, or dried. (b) Limit includes emissions from heated air or heated drying oft products for first 12 hours after removal from any machine.	(a) Uncontrolled emissions are at a level representing 85 percent control. (b) Use of RACT. (c) Installations regulated by regulations 18, 19, and 21. (d) Spraying of insecticides, pesticides, or herbicides. (e) Emission of organic materials from the heat setting, drying, or curing of knitted or woven textiles in a tenter frame. (f) Blending of distillate or residual fuel oils. (g) Coatings used to meet U.S. military performance specs if no satisfactory coating alternative or control is feasible.
III	D.C.	700	Approved	(a) ≤15 lb/day and ≤3 lb/hr of photochemically reactive solvent. (b) ≤40 lb/day and ≤8 lb/hr of nonphotochemically reactive solvent.	(a) Sources subject to regulations §§701-713. (b) Uncontrolled organic emissions that are reduced ≥85%.
IV	KY	401 KAR 61:060	Approved	(a) ≤40 lb/day and ≤8 lb/hr. (b) Reduction by incineration (90% oxidized), adsorption, approved process modifications.	(a) Emissions reduced by 85%. (b) Manufacture, transport, loading, storage of organic solvents or materials containing organic solvents. (c) Use of herbicides, pesticides, insecticides. (d) Use of saturated halogenated HCs or perchloroethylene. (e) VOC consists of nonchemically reactive solvent ≤30% by volume. (f) Volatile content is only H_2O and non-photoreactive solvent and solvent ≤20% by volume. (g) Emergency releases.

Test Procedure	Averaging Time	Recordkeeping	Comments
Manner approved by the Commissioner. [22a-174-5(a)(b)(6)]	Not specified.	Not specified.	Must supply chemical and physical characteristics of organic solvents and amount of each consumed to Commissioner upon request.
Not specified	Not specified	Not specified	Director may classify any particular solvent, regardless of chemical structure, to the appropriate Group based on reactivity.
Not specified	Not specified	Any source emitting ≥25 tpy of air pollutant shall maintain written records including emission dates, and results, methods, and procedures of sampling [500.2].	
(a) Material balance. (b) If (a) impossible, engineering analysis by department or performance tests.	Not specified	Not specified	(a) Includes emissions from processing of continuous web strip or wire. (b) Includes emissions from heated drying of products for 12 hrs from removal from facility. (c) Includes emissions from cleanup.

SOURCE CATEGORY: Organic Solvents (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VI	LA	22.9	Approved	(a) Use incineration where 100% of carbon oxidized to CO_2, or carbon adsorption, or approved equivalent.	(a) Emission source having emission of ≤ 3 lbs/hr or 15 lb/day.
VI	OK	3.7.3	Approved		
IX	CA (BA)	8-2-100	Approved	(a) ≤ 15 lbs/day of organic compounds and ≤ 300 ppm total carbon on a dry basis.	(a) Provided best modern practices are used: operations consisting entirely of natural gas, preparation of food for human consumption, blind changing, cooling towers, railroad tank cars, marine vessels, and crude oil production operattions. (b) Cold reduction equipment used in metal forming provided the cooling oil introduced in the cold reduction system is not less than 90% by weight normal paraffins of a carbon number 12 or higher and that such oil shall have a RVP ≤ 1.0 psia. (c) Provided best modern practices are used, equipment specified in 8-2-115 and Equipment or Exhaust Systems specified in 8-2-116 (see rule). (d) Operations convered by Rules of Regulation 10.
IX	CA (SD)	66	Approved	(a) ≤ 15 lbs/day of organic material from any article, machine, equipment, or other contrivance where organic solvent vapor contacts flame in the presence of oxygen or in which any organic solvent is evaporated at temperatures >200°F (93.3°C).	(a) Discharge reduced ≥ 85 percent.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	(a) Recodification of regs in progress. (b) Application information published at 45 FR 0903, and 47 FR 53412
			(a) Described under "Surface Coating-Aerospace" and "Clean-up Solvents."
Organic compounds to be measured as prescribed in the Manual of Procedures, Volume IV, ST-7.	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Includes emissions from equipment used to process a continuous web, strip, or wire.

SOURCE CATEGORY: Paints and Resins Manufacturing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	MD		Under development		
III	PA		Under development		
IV	AL	8.29	Approval pending	(a) Equip storage vapor tanks of >10 kPa vapor pressure with pressure/vacuum conservation vents set at ±0.2 kPa. (b) Tanks >250 gallons must use submerged fill-pipe, bottom-fill. (c) Covers on open-top tanks where non-water-based coating produced, and on tanks storing VOC-containing cleaning substances. (d) Operate and maintain grinding mills according to manufacturer's specifications. (e) Visually inspect pumps weekly; repair ≤15 days. (f) Collect gases and vapors from varnish cooking operations and control by ≥85% before discharge.	(a) Facilities emitting ≤100 tpy VOC. (b) Tanks where more effective control used.
V	MI		Under development		
V	WI		Under development		
VII	MO (KC)	10 CSR 10-2.300	Approval pending	(a) Pressure/vacuum conservation vents set at 0.2 kPa on tanks storing VOC with vapor pressure >10 kPa. (b) Submerged-fill pipe or bottom fill for stationary VOC storage containers with capacity >250 gallons. (c) Covers closed on open-top tanks used in production of non-waterbase coating products, and on all tanks containing VOC used for cleanup. (d) Collect gases and vapors from varnish coating operations and control by ≥85% before discharge. (e) Operate and maintain grinding mills according to manufacturers' specifications. (f) Polymerization of synthetic varnish or resin to occur in enclosed operation using surface condenser exit stream ≤ temperature at which vapor pressure is 3.5 kPa for any organic component.	(a) Installations with potential to emit ≤250 kg/day or ≤100 tpy VOC. (b) Tanks where more effective control used.

Test Procedure	Averaging Time	Recordkeeping	Comments
			Two source specific regulations are under development; one for paints and one for resins.
Not specified.	Not specified.	(a) Record leak detection and repair dates. (b) Retain for 2 years.	(a) Jefferson County, AL, regulation. (b) Applies to manufacture or processing of paints, varnishes, lacquers, enamels, and other allied coating products.
			Developing one rule covering resins and one covering paints.
			Developing one rule covering resins and one covering paints.
(a) EPA RM 25 [10 CSR 10-6.030 (13)]. (b) Monitor add-on control device parameters as described.		(a) Record all monitoring information. (b) Retain for 2 years.	(a) Applies to manufacture of paints, varnishes, lacquers, enamels, and other allied surface coating products.

SOURCE CATEGORY: Paints and Resins Manufacturing (continued)

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII MO (St. L.)	10 CSR 10-5.390	Approved	(a) Pressure/vacuum conservation vents set at 0.2 kPa on tanks storing VOC with vapor pressure >10 kPa.	(a) Installations with potential to emit ≤250 kg/day or ≤100 tpy VOC.
			(b) Submerged-fill pipe or bottom fill for stationary VOC storage containers with capacity >250 gallons.	(b) Tanks where more effective control used.
			(c) Covers closed on open-top tanks used in production of non-waterbase coating products, and on all tanks containing VOC used for cleanup.	
			(d) Collect gases and vapors from varnish coating operations and control by ≥85% before discharge.	
			(e) Operate and maintain grinding mills according to manufacturers' specifications.	
			(f) Polymerization of synthetic varnish or resin to occur in enclosed operation using surface condenser exit stream ≤ temperature at which vapor pressure is 3.5 kPa for any organic component.	

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) EPA RM 25 [10 CSR 10-6.030 (13)]. (b) Monitor add-on control device parameters as described.		(a) Record all monitoring information. (b) Retain for 2 years.	(a) Applies to manufacture of paints, varnishes, lacquers, enamels, and other allied surface coating products. (b) Applies to South St. Louis area.

SOURCE CATEGORY: Polyethylene Bag Sealing Operations

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII MO (St. Louis)	10 CSR 10-5.360	Approved	(a) Control method to reduce 65% (wt) VOC emissions. (b) For add-on controls, monitor incinerator exhaust gas temperature, temperature rise across catalytic incinerator bed, VOC breakthrough on carbon adsorption unit.	(a) Operations limiting <250 kg/day or <100 tpy VOC. (b) Seasonal afterburners used to accomplish compliance may discontinue operation 10/15-4/15.

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 25 [10 CSR 10-6.030(8)].	Not specified	(a) Submit annually composition and amount sealant used, amount solvent used, amount clean-up solvent discarded. (b) Retain for 2 years.	(a) Applies to South St. Louis area.

SOURCE CATEGORY: Pumps and Compressors

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22-174-20 (d)	Approved	Mechanical seals or equivalent.	Vapor pressure <1.5 psia.
III	DC	711	Approved	Mechanical seals or other equivalent equipment.	Not specified
IV	AL	6.9	Approved	Units in Mobile County shall have mechanical seals or approved equivalent.	(a) Sources with potential VOC emission rate of <100 tpy [6.1.1(b)]. (b) Sources used exclusively for chemical or physical analysis or determination of product quality, where emissions ≤363 kg/mo.
VI	LA	22.7	Approved	(a) Mechanical seals or approved equivalent.	Not specified
VI	OK	3.7.2(d)	Approved	(a) Equip rotating type with mechanical seals or equivalent. (b) Equip reciprocating type with packing glands, so emissions from drain recovery system are ≤2 cu. in. liquid organic material per 15 min. period per component.	(a) Storage, loading, processing, manufacturing, burning of organic material on farms and ranches.
IX	CA (BA)	8-25-100	Approved	(a) Pump or compressor emitting >10,000 ppm POC must: - if not essential, remove for repairs ≤15 days. If spare also exceeds limit, complete repairs ≤30 days. May use spare. - if not essential, and repaired pump or compressor emits >75,000 ppm, remove from service <15 days, or complete repairs within 30 days. - If nonessential, and repair successful, not require repairs nor service removal for 6 months. - if essential with packed seal, minimize leak within 15 days of discovery. If still exceeds limit, repair at next scheduled turnaround. (b) Measure pump or compressor within 15 days of leak repair or minimization. (c) Measure pump for POC 1/yr. (d) Measure compressor for POC 1/quarter. (e) Measure new pump or compressor for POC within 7 days of operation. (f) Chemical plants may choose following alternative inspection plan in lieu of limits (b)-(e) above: - identify leaking components awaiting repair in readily observable way - any component not so identified shall be a violation (g) Visually inspect pumps once per 7 days. If leak observed, measure within 2 days.	(a) Pumps or compressors handling only natural gas or organic liquid with a Reid vapor measure <1.5 psia. (b) Pumps or compressors using seal oil systems (see rule 2). (c) Compressors whose operator demonstrates POC emissions <0.4 lb/h. (d) Pumps or compressors controlled ≥95% by vapor recovery or disposal system. (e) Before 1/1/85, chemical plants.
IX	CA (SC)	466	Approved	(a) Equip with adequate seals or equivalent such that leakage is <3 drops/minute, no visible liquid mist or visible indication of vapor leakage for liquids being pumped, and no visible indication of leakage at or near seal/shaft interface for gas compressors. (b) Inspect operating pumps and compressors for visual leakage once every 1/24 hrs, except if <3 mi. from continuously manned control center, inspect 1/8 hrs.	(a) Pumps or compressors with driver of <1 hp. (b) Compressor operating at temperatures >500°F. (c) Components vented to a pollution control system, shut-down for maintenance, or regulated by Rule 1005. (d) Persons complying with Rule 430.

Test Procedure	Averaging Time	Record-keeping	Comments
Manner approved by the Commissioner [22a-174-5(a)(b)(6)].	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Approval by Mayor is required. (b) No major (>100 TPY) sources in the District.
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Recodification of regs in progress.
Not specified	Not specified	Not specified	(a) EPA has proposed disapproval of exemption 3.7.1(d)(3).
(a) Approved portable combustible gas indicator, calibrated with methane.	Not specified	(a) Maintain records 2 years. (b) Maintain records identifying components awaiting repairs. (c) Submit by 11/1/83 (1/1/84 for chemical plants) list of all pumps and compressors.	(a) Applies to pump and compressor seals at petroleum refineries and chemical plants. (b) POC = precursor organic compound.
Not specified	Not specified	Not specified	

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (BA)	8-30-100	Approved	Solvent cleaning station: (a) Covers on all reservoirs, sinks, or containers holding POC. (b) Freeboard ratio $\geq$0.75 for reservoirs used and sinks installed after 1/1/84 according to schedule described. (c) If solvent flow utilized POC applied only as fluid stream with pressure low enough to not cause splashing. (d) No evaporation from storage or disposal of POC. (e) Operate and maintain all solvent cleaning station equipment properly. (f) Repair liquid solvent leaks immediately or shut down equipment. (g) Negative Photoresist Operations: all exhaust gases shall be vented to control device $\geq$90% effective, as of 1/1/87.	(a) Facility emitting <15 lb/ day POC. (b) Limit (g) does not apply if negative photoresist operation: complies with approved alternative emission control plan and emits no more POC from all operations than limit (g) would allow; documents compliance through records; plant gets credit for conversion to positive photoresist.

Test Procedure	Averaging Time	Recordkeeping	Comments
		(a) Report annually quantity of listed compounds purchased, and separate totals of POC and non-POC organic compounds disposed or reclaimed in liquid form.	(a) POC = precursor organic compound. (b) Amendments to this rule have been submitted to EPA for approval.

SOURCE CATEGORY: Small Tanks

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.2	Approved	(a) External surface of stationary tank (with capacity >2,000 gallons) exposed to sun's rays must be painted and maintained white. [Note: words or logos are permitted if cover either ≤200 ft^2, whichever is less.] (b) Stationary storage tank >10,000 gallon must have control appratus as described in Table 1 of regulations. Will be either no control, conservation vent, or floating roof or approved equivalent. (c) Tanks subject to controls under (b) above that are equipped with gauging and/or sampling systems must be vapor-tight except when gauging or sampling is occurring.	(a) For limit (a), tank maintained under controlled elevated temperature or equipped with vapor control system reducing VOC emissions by ≥98% (wt). (b) For limit (a), tank capacity ≤2000 gallons. (c) For limit (b), tanks that are required to have conservation vents are exempted if located ≥8 in. underground or approved equivalent. (d) For limit (b), ≤10,000 gallons or as stated in Table 1 in regulation.
IV	AL	6.3	Approved		
IV	KY	401 KAR 61:050	Approved		
VI	LA	22.4	Approved	Container is to be equipped with a submerged fill pipe, a vapor recovery system or other approved equivalent equipment or means.	(a) ≤250 gallons capacity. (b) Storage of crude or condensate.
VI	OK	3.7.2 3.7.5-4 (b)(2)	Approved	(a) In attainment areas, organic material storage tanks ≥400 gallons capacity must be equipped with permanent submerged fillpipe or organic material vapor recovery systems [3.7.2]. (b) In nonattainment areas, organic material storage tanks of between >400 and <40,000 gallons capacity must be equipped with a submerged fillpipe or is bottom filled and for storage tanks with >4,000 and <40,000 gallons a vapor control system that reduces VOC by ≥90% by weight contained in the displaced vapors (or other approved equivalent equipment) is required [3.7.5-4(b)(2)].	(a) For limit (b), average daily throughput of each container is <750 gallons.
VI	TX	V§115.11 Table 1 and V§115.101	Approved	(a) Submerged fillpipe for tanks >1,000 gal and ≤25,000 gal storage capacity; ≥1.5 psia and <11 psia [115.11] and [115.101]. (b) Submerged fill or vapor recovery system for tanks >1,000 gal and ≤25,000 gal and ≥11 psia if for VOC other than crude oil and condensate [115.101]. (c) Vapor recovery system or internal or external floating roof for tanks >25,000 gal. and ≤42,000 gal storage capacity; ≥1.5 psia and <11 psia [115.101].	(a) Crude oil and condensate storage containers.
IX	CA (BA)	8-5-302	Approved	(a) Pressure vacuum valve set to ≤10% of maximum allowble working pressure or vapor loss control device for gasoline in above-ground stationary tank ≤40,000 gal.	(a) Storage tanks with vapor pressure ≤1.5 psia. (b) Stationary tanks with capacity <260 gal. (c) Stationary storage tank installed prior to 1/4/67 not used for gasoline storage to internal combustion engine fuel tanks, and of capacity <2,000 gal. (d) Storage tanks during cleaning, stack change, repair, or contaminated stock removal if written approval received. (e) Tank <2,000 gals capacity installed before 1/9/76.

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9]	Not specified	Not specified	(a) Covered under general regulation for storage, transfer, disposal of VOC's. (b) Applies to storage tanks with capacities between >2,000 and ≤40,000 gallons.
			(a) Covered under general regulation for storage, transfer, disposal of VOC's.
			(a) Covered under general regulation for storage, transfer, disposal of VOC's.
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Rule 3.7.2 is part of general regulation for storage, transfer, disposal of VOC's in attainment areas. (b) Rule 3.7.5-4(b)(2) is for small tanks (400-40,000 gallons capacity) in nonattainment areas.
			(a) For Limit (a) Counties: Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, Travis. (b) For Limits (a), (b), and (c), Counties: Brazoria, Dallas, El Paso, Galveston, Gregg, Harris, Jefferson, Neuces, Orange, Tarrant, Victoria.
(a) Method 13, "Manual of Procedures."	Not specified	Not specified	(a) Incorporated in organic liquid storage rule.

SOURCE CATEGORY: Small Tanks (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (SD)	61	Approved		
IX	CA (SC)	463	Approved	(a) Stationary tank <39,630 gal must have pressure vacuum valve set within 10% of maximum allowable working pressure or vapor loss control device as described.	(a) ≤2,000 gal in service before 1/9/76, or ≤251 installed on or after 1/9/76.

Test Procedure	Averaging Time	Recordkeeping	Comments
			(a) Covered under general regulation for storage, transfer, disposal of VOC's.
Not specified	Not specified	Not specified	(a) Rule 463 applies generally to storage of organic liquids.

SOURCE CATEGORY: SOCMI - Distillation

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Solvents Disposal

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22-174-20 (j)	Approved	May not dispose >1-1/2 gallons/day of organic solvent by means that permit evaporation.	Not specified
I	MA	310 CMR 7.18 (2)(d)	Approved	(a) After 7/1/80, dispose VOC's so as to minimize evaporation. (b) Container with tight-fitting cover. (c) Incineration, licensed disposal or reclamation or approved equivalent.	Not specified
III	MD	10.18.0606 (D)	Approved	May not treat or dispose of waste containing VOC so as to allow >20 lb/day VOC evaporation to the atmosphere.	(a) Operation of a municipal waste water treatment plant. (b) Disposal of waste in a landfill in accordance with the requirements established by the Waste Management Administration.

Test Procedure	Averaging Time	Record-keeping	Comments
Manner approved by the Commissioner [22a-174-5(a)(b)(6)]	Not specified		
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	

SOURCE CATEGORY: Stage II Controls

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA		Under development		
II	NJ		Under development		
II	NYC Metro	Part 230	Approval pending	(a) Dispensing gasoline into motor vehicles only through approved Stage II system. (b) Stage II system $\geq$90% efficient. (c) State approved control system. (d) Install and maintain vapor recovery equipment properly. (e) Posted operating instructions. (f) All new or modified stations must have Stage I and II.	(a) Stations $\leq$250,000 gal/yr throughput. (b) Where Stage I controls are not required. (c) Stations outside NYC Metro area.
III	D.C.	705	Approved	(a) Fill nozzle by which gasoline is transferred to vehicle from stationary storage container shall be designed: (1) to prevent vapor discharge from vehicle filler neck or fill nozzle, (2) to direct displaced vapor to a system other than vacuum assist wherein $\geq$90% of organics are removed, recovered, and/or destroyed, or to a vacuum assist process wherein $\geq$96% of organics are removed, recovered, and/or destroyed, and (3) to prevent fuel tank overfills and spillage. (b) A vapor-balance system is assumed to be in compliance with (a)(2) above if (d) and (e) below are satisfied. (c) Vapor balance system must have a vapor-tight vapor return hose, a vapor-tight seal between the fill nozzle and vehicle filler neck, a no-seal/no-flow fill nozzle, a pressure-sensitive flow cut-off set to $\geq$10 in. w.g., an automatic flow shutoff activated when gasoline circulates back from the fill nozzle to the storage tank, $\leq$9 feet of vapor return hose unless the hose is kept out of the way when not in use, and a device to limit gas flow to $\leq$8 gal/min. (d) Fill nozzle must use proper operating practices, including draining the vapor return hose $\geq$1/day, waiting $\geq$3 seconds after fuel shutoff until pressure between tank and storage is balanced before disconnecting nozzle, and replacing vapor return hose so vehicle will not ride over it. (e) Transfer of gasoline must automatically shutoff when tank is full. Additional gasoline transfer after automatic shutoff is prohibited. (f) Instruction for use must be clearly displayed.	Not specified
IV	AL	8.30	Approval pending	(a) Gasoline transfer through approved fill nozzle that prevents vapor discharge, directs vapors to control system, and prevents overfills and spillage. (b) Vapor control system to include vapor balance system or refrigeration condensation system. (c) Follow nozzle maintenance procedures as described. (d) Conspicuously post instructions, warnings, etc.	(a) Gasoline dispensing facilities using 12 fill nozzles. (b) Gasoline dispensing facilities <50,000 gal/mo. gasoline receipts averaged for the previous June, July, August. (c) Gasoline dispensing facilities exempt under 8.7.2.
VI	TX		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	(a) Maintain record of all gasoline delivered to site. (b) Maintain records 2 yrs.	
Not specified	Not specified	Any source emitting $\geq$25 tpy of air pollutant shall maintain written records including emission data, and results, methods, and procedures of sampling [500.2].	
(a) EPA RM 25, 25A or 25B for vapor control system. (b) EPA 450/2-78-051, Appendix B for fill nozzle.	Not specified	Not specified	(a) Jefferson County, AL, regulation. (b) Regulation effective 6 months prior to restart of U.S. Steel Corp. Fairfield coke facility. If U.S. Steel does not notify Health Officer that restart will occur prior to 6/1/88, regulation will not become effective.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII	MO (St. L.)	10 CSR 10-5.220	Approved	(a) Equip stationary gasoline tank with vapor recovery system certified to have 95% removal efficiency including system to gather vapors and gases from motor vehicle refueling and to dispose of them. (b) Gas-tight tank gauging and sampling sites or ports. (c) Post-operating instructions conspicuously for vehicle refueling. (d) Director shall identify and list equipment defects that substantially impair effectiveness of equipment useful in meeting requirements of this rule. (e) Defects identified at a refueling station shall cause system to be marked "Out of Order;" such may not be used until system is repaired and reinspected.	(a) Tank with capacity ≤1,000 gal. (b) Tank used primarily for agricultural or husbandry implementation.
IX	CA (BA)	8-7-100	Approved	(a) Transfer only onto motor vehicles when ARB certified vapor recovery system used. (b) No topping off of fuel tanks. (c) No sale or installation of noncertified vapor recovery equipment. (d) Install and maintain vapor recovery equipment properly. (e) Defective vapor recovery system shall be marked "Out of Order," and shall not be used until repair and reinspection has occurred. (f) Operating instructions conspicuously posted. (g) No gas spilled, discarded in sewers, stored in open containers, or in any way permitted to evaporate.	(a) Delivery of fuel to tanks determined to be inapplicable to Rule. (b) Facilities where Stage II infeasible. (c) Vehicle-to-vehicle refueling. (d) Facilities refueling tanks with capacity ≤5 gallons. (e) Facilities refueling vehicles not defined as motor vehicles. (f) Retail facilities with throughput <180,000 gal where Stage II piping not installed before 7/1/83. (g) Non-retail facilities with annual throughput <60,000 gal.
IX	CA (SD)	61.4	Approved	(a) >95% transfer and venting VOC losses controlled. (b) Facility storing and dispensing beofre 7/1/78 where total output <30,000 gal/yr, ≥90% and venting VOC losses controlled.	(a) Transfer from VOC storage tank ≤550 gal to motor vehicle fuel tank with capacity ≤5 gallons.
IX	CA (SC)	461	Approved	(a) Dispensing unit equipped with CARB certified vapor recovery system, correctly operated.	(a) Dispensing to tanks ≤5 gal. (b) Dispensing facility existing before 3/5/79 and located in structure where bottom of dispensing at lower elevation than top of gasoline storage containers.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	Applies in South St. Louis area as defined.
ST-27 and ST-30, "Manual of Procedures," Volume IV.	Not specified	Not specified	
Tests of representative number of vehicles.	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) If vapor recovery system breaks down, procedures of Rules 102 and 430 apply.

SOURCE CATEGORY: Storage of Highly Volatile Organic Compounds

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.2	Approved	Stationary tanks with capacities ≥1000 gallons storing VOC with a vapor pressure >13.0 psia must have vapor control system to reduce VOC's to atmosphere by ≥90% by weight of process emission rate.	(a) Tanks that are required to have conservation vents are exempted if located ≥8 in. underground or approved equivalent. (b) ≤13 psia or <1,000 gallon capacity.
IV	KY	401 KAR 61:050	Approved		
VI	LA	22.3	Approved		
VI	OK	3.7.5-4(b)(1)	Approved		
VI	TX	V§115.11, Table 1	Approved	Submerged fillpipe and vapor recovery system for material ≥11 psia.	(a) ≤25,000 gallons nominal storage capacity. (b) Crude oil or condensible storage containers.
VI	TX	V§115.101	Approved	(a) For VOC storage other than crude oil and condensate: - submerged fillpipe or vapor recovery system for tanks >11 psia and with nominal storage capacity >1000 gal and ≤25,000 gal. - submerged fillpipe and vapor recovery system for tanks ≥11 psia and >25,000 gal nominal storage capacity. (b) For storage of crude oil and condensate: - submerged fillpipe for tanks ≥11 psia and with nominal storage capacity >1,000 gal and ≤42,000 gal. - submerged fillpipe and vapor recovery system for tanks ≥11 psia and >42,000 gallons nominal storage capacity. (c) Other requirements exist for tanks with floating roofs.	(a) Crude oil and condensate in tanks <210,000 gallons [115.105]. (b) Storage containers of <25,000 gallons located at motor vehicle fuel dispensing facilities. (c) Welded tanks with metallic type shoe primary seal from top of shoe seal to tank wall if installed before 8/22/80.
VIII	CO	Part 1, Reg. 7 (IV)	Approved	Store highly volatile compounds (propane, butane) either: (a) in pressure tank capable of maintaining working pressures sufficient to prevent vapor loss, or (b) other approved methods and/or equipment.	Emissions from any source of methane or ethane.
IX	CA (BA)	8-5-100	Approved		
IX	CA (SD)	61	Approved		
IX	CA (SC)	463	Approved	(a) Stationary tanks >39,630 gal capacity and vapor pressure >11 psi may not use floating roof. Must use: - fixed-roof as described, or - vapor recovery efficiency >95% as described.	

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9]	Not specified	Not specified	Covered under general regulation for storage, transfer, disposal of VOCs.
			Covered under general regulation for storage, transfer, disposal of VOCs.
			Covered under general regulation for storage, transfer, disposal of VOCs.
			Covered under general regulation for storage, transfer, disposal of VOCs.
Not specified	Not specified	Not specified	(a) Other requirements exist for material >1.5 psia and <11 psia. (b) Counties: Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, Travis.
Not specified	Not specified	(a) Tanks with floating roof required to record VOC type, average monthly vapor pressure, yearly inspection results [115.104]. (b) Retain for 2 years [115.104].	(a) Other requirements exist for material >1.5 psia and <11 psia. (b) Counties: Brazoria, Dallas, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, Victoria.
Not specified	Not specified	Not specified	
			Covered under general regulation for storage,transfer, disposal, of VOCs.
			Covered under general regulation for storage,transfer, disposal, of VOCs.
(a) Emissions test may be required for closure seal.	Not specified	Records of liquids stored in containers and their vapor pressures.	Covered under general regulation for storage,transfer, disposal, of VOCs.

SOURCE CATEGORY: Sulfonate Manufacture

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	PA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Surface Coating - Aerospace

<table>
<tr><th>EPA Rgn</th><th>State</th><th>Regulation No.</th><th>EPA Approval Status/Date</th><th>State Limit or Requirement</th><th>Exemptions/ Cutoffs</th></tr>
<tr><td>IV</td><td>AL</td><td>8.25</td><td>Approval pending</td><td>(a) Use air-assisted airless application methods or those with equivalent transfer efficiency.
(b) Primers used on aircraft not using phosphate as a hydraulic fluid must contain ≤2.92 lb VOC/ gal. primer, less water as applied.
(c) Primers used on aircraft using phosphate ester as a hydraulic fluid, must contain <2.92 lb/gal VOC or ≤5.4 lb/gal VOC if owner is in compliance program to enable 2.92 lb/gal to be attained.
(d) Use coating materials with vapor pressure <45 mmHg for surface preparation or cleanup, except coating stripping.
(e) Use closed container for disposal of VOC-containing materials.
(f) Use cleanup materials containing ≤15% (wt) VOC or collect and dispose of ≥85% of VOC from cleanup.
(g) Use stripper containing ≤3.13 lb/gal VOC and has vapor pressure ≤9.5 mmHg.</td><td>(a) Facilities emitting ≤ tpy VOC.
(b) Coatings used in volumes of <20 gal/yr.</td></tr>
<tr><td>IV</td><td>TN</td><td>1200-3-18-.30</td><td>Approved</td><td>(a) ≤5.4 lb/gal primer before 1/85; ≤2.9 lb/gal primer after 1/1/85.
(b) ≤5 lb/gal topcoating.
(c) ≤2.1 lb/gal temporary topcoating.
(d) For surface preparation or cleanup, VOC's with vapor pressure ≥77.6 mmHg.
(e) Closed container for VOC-laden materials.
(f) Collect and dispose of 85% of VOC's used for cleanup.
(g) ≤3.3 lb/gal stripper.
(h) Approved equivalents for above limits are permitted.</td><td>(a) For limit (d), paint remover.
(b) Coatings for masking and chemical etching operations; adhesive bonding primer, flight test coatings, space vehicle coatings, fuel tank coatings.
(c) Facilities emitting <100 tpy in rural counties or <25 tpy in urban counties.</td></tr>
<tr><td>VI</td><td>OK</td><td>3.7.3(a)</td><td>Approved</td><td>(a)
<table>
<tr><th>Coating Type</th><th colspan="3">Limit (lb/gal)</th></tr>
<tr><th></th><th>1/79</th><th>1/81</th><th>1/82</th></tr>
<tr><td>Alkyd Primer</td><td>5.6</td><td>5.2</td><td>4.8</td></tr>
<tr><td>Vinyls</td><td>6.4</td><td>6.4</td><td>6.0</td></tr>
<tr><td>NC Lacquers</td><td>6.8</td><td>6.6</td><td>6.4</td></tr>
<tr><td>Acrylics</td><td>6.4</td><td>6.4</td><td>6.0</td></tr>
<tr><td>Epoxies</td><td>5.6</td><td>5.2</td><td>4.8</td></tr>
<tr><td>Maintenance Finishes</td><td>5.6</td><td>5.2</td><td>4.8</td></tr>
<tr><td>Custom Products Finishes</td><td>6.8</td><td>6.6</td><td>6.5</td></tr>
</table>
(b) ≤3,000 lb organic material/day and ≤450 lb/hr.</td><td>(a) For limit (b), discharge reduced 85%, or BACT applied.
(b) Facilities emitting <100 lb/24 hr.
(c) Uncontrolled emissions reduced by 90% by incineration; or 85% by absorption or equivalent.</td></tr>
<tr><td>VI</td><td>TX</td><td>115.191(9)(A)(v)</td><td>Approval pending</td><td>(a) Daily weighted average VOC emissions ≤3.5 pounds VOC/gal coating as applied for exterior prime coat on aircraft.</td><td>(a) Exterior coating of a craft other than prime coat.
(b) Facilities emitting <550 lb VOC/day uncontrolled.</td></tr>
<tr><td>VII</td><td>MO (St.L.)</td><td>10 CSR 10-5.330</td><td>Approved</td><td>(a)
<table>
<tr><th>Coating</th><th>Emission Limit (lb/gal)</th></tr>
<tr><td>Primer</td><td>6.0 (12/31/82)</td></tr>
<tr><td>Topcoat</td><td>5.5 (12/31/82)
5.0 (12/31/85)</td></tr>
<tr><td>Maskant</td><td>3.0 (12/31/82)
1.0 (12/31/85)</td></tr>
</table></td><td>(a) Exterior refinishing of airplanes.
(b) <10 tpy VOC emitted.
(c) Adhesion promoters, adhesive bonding primer, flight test coatings, space vehicles coatings, fuel tank coatings, dry film lubricants.</td></tr>
</table>

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 24.	Not specified	Not specified	(a) Jefferson County, AL, regulation.
(a) Approved methods consistent with regulation. (b) Certification of coating composition by manufacturer. (c) Monitoring to confirm compliance.	Not specified	Not specified	Rules applied after 8/1/82.
Not specified	Not specified	Not specified	May develop plant-wide emissions plan as described.
Not specified	Daily weighted	Not specified	(a) State developing revision to lower exemption cut-off level. (b) Interior coating operations fall under miscellaneous metal parts and products [115.191(9)].
EPA RM 25 [10 CSR 10-6.030 (13)]	Not specified	(a) Submit reports as described when requested. (b) Retain for 1 year.	(a) Applies to South St. Louis area as described. (b) May use approved plant-wide compliance plan as described. (c) Aerospace assembly and components.

SOURCE CATEGORY: Surface Coating - Aerospace (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/Cutoffs
IX	CA (BA)	8-29-100	Approved	(a) Primer 2.9 lb/gal (8/1/85) All other coatings except primer and maskant for chemical processing 5.1 lb/gal (8/1/85) (b) Temporary protective coating limited to a VOC content >250 grams per liter (2.1 lbs/gal) as applied, excluding water. (c) Stripper must contain <400 g/l of POC, or have vapor pressure of <10 mmHg. (d) Maskants for chemical processing to aerospace components: the VOC emissions from coatings operations must be reduced by 85 percent, or the coating must contain <600 g/l VOC, as applied. (e) May use approved bubble, as described.	(a) Electronic Industries: fabrication of electronic components, including but not limited to microprocessors, circuit boards, control systems and instrumentation. (b) Federal Government: until December 31, 1983, coating of aerospace assemblies and components procured by the Federal Government. (c) Low Usage Coatings: coatings with separate formulations are used in volumes of 200 gallons per year. (d) Small Facilities: aerospace assembly coating line which emits <9 kilograms (20 pounds) of VOC per day. (e) Paper-Fabric-Film Coating: source subject to and complies with the provisions of Regulation 8, Rule 12. (f) Tank Type Stripper: employing sealing fluid ≥4 in. depth and floats on stripper surface. Sealing fluid consists of waer or fluid with <10 mmHg vapor pressure.
IX	CA (SD)	67.9	Approved	(a) Use coatings with VOC content ≤: Coating — Limit (gr VOC/l) Primer (except adhesive bonding) 350 (7/1/85) Other coatings (except temporary protective, primer, and maskant for chemical processing 600 (7/1/85) Maskant 600 (7/1/85) Temporary protective coating 250 (b) VOC must have <0.77 psia vapor pressure used for surface preparation or cleanup. (c) Closed containers for storage of solvent-laden materials; disposal to permitted facility in sealed metal or plastic molded drums with snap-on or screw-type lids. (d) Control 85% VOC from spray equipment cleanup. (e) Stripper must contain ≤400 gm/l VOC and have ≤0.19 psia vapor pressure. (f) May reduce emissions from maskant ≥85% in lieu of meeting coating content limit. (g) Approved alternative emission control plan permissible as described.	(a) Use of 1,1,1-trichloroethane, trichlorofluoroethane, and methylene chloride. (b) A defined area using <1 gal/day. (c) Stationary source using ≤50 gal/yr. (d) Coatings with separate formulations used <20 gal/yr per coating, and <50 gal/yr total for all coatings. (e) For limit (b) stripper and use of MEK used solely to clean shop residue from components prior to painting.
IX	CA (SC)	1124	Approved	(a) After 1/1/85: - primer ≤350 gm/l - other coatings except maskant ≤600 gm/l - maskant for chemical processing ≤600 gm/l or 80% VOC emission control. (b) Approved alternative emission reduction plan permissible as described.	(a) Coatings with separate formulations used <20 gal/yr. (b) 1,1,1-trichloroethane, methylene chloride, trichlorotrifluoroethane. (c) Facility emitting <20 lb/day VOC every day.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Methods 21 or 22, "Manual of Procedures," Volume III for sample analysis. (b) ST-7, "Manual of Procedures," Volume IV for VOC's.	Not specified	Not specified	(a) Interim standards were effective 8/1/83. (b) POC = precursor organic compound.
Not specified	Not specified	Not specified	(a) Applicable to coating, masking, surface cleaning, paint stripping of aerospace components. (b) Applicable after 10/1/83. (c) Sources are subject to Rule 66 until comply with this rule.
Procedures detailed in Rule 107.	Not specified	Not specified	(a) Interim standards were established prior to 1/1/85. (b) Facilities subject to this rule shall comply with rule 442 until achieve compliance with this rule.

SOURCE CATEGORY: Surface Coating - Aerospace (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
X	WA	3.09	Approved	(a) $\leq$650 gm/l primer $\leq$600 gm/l topcoat $\leq$250 gm/l temporary protective coating. (b) No VOC's $\geq$15 psia used for surface preparation cleanup, excluding paint removal. (c) 85% VOC control for cleanup of spray equipment. (d) Stripper: $\leq$400 gm VOC/l and vapor pressure $\leq$0.19 psia. (e) Achieve through reasonably available low solvent coating, vapor collection and disposal system, or approved equivalent.	(a) Facility emitting <40 lb/day VOC annual average. (b) Coatings for masking in chemical etching operations. (c) Adhesive bonding primer. (d) Flight test coatings. (e) Space vehicle coatings. (f) Fuel tank coatings. (g) Coating for which reasonably available alternative coating does not exist.

Test Procedure	Averaging Time	Recordkeeping	Comments
			(a) Puget Sound Air Pollution Control Agency regulation; covers King, Kitsap, Pierce, and Snohomish Counties.

SOURCE CATEGORY: Surface Coating - Glass

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.5 Table 3B	Approval pending.	(a) $\leq$3.0 lb/gal coating (minus water).	(a) Application rate $\leq$1 gal/hr and 5 gal/day. (b) Application for purpose of developing new coating or equipment or for performing research if rate $\leq$2 gal/hr and 3 gal/day.
IX	CA	1145	Approved	(a) $\leq$2.3 lb/gal coating as applied excluding water. (b) Equivalent emission control plan (bubble) permissible as described.	(a) Touch-up and repair. (b) Metallic coatings. (c) Stencil or mask coating. (d) Clear or translucent coatings as described. (f) Rubber coatings for aircraft radome areas. (g) Reflector coatings. (h) Coatings used $<$50 gal/yr if substitute complying coatings not available. (i) Coatings regulated or specifically exempted elsewhere.

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9]	Not specified.	(a) By 1/1/87, and once per quarter, submit progress reports.	(a) A weighted daily mean can be used to demonstrate compliance where >1 product is manufactured on a single surface coating line. (b) By 1/30/87, submit plan to achieve compliance. (c) By 5/1/87, commence construction or installation of control measures. (d) Achieve compliance by 12/31/87.
VOC content of coatings determined pursuant to Rule 107.	Not specified	Not specified	(a) Coating operation subject to this rule shall comply with Rule 442 until compliance with this rule achieved. (b) Coatings exempt from this rule shall comply with Rule 442.

SOURCE CATEGORY: Surface Coating - Heavy Off-Highway Vehicle Production

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/Cutoffs
V	IL		Under development		
VII	MO (KC)	10 CSR 10-2.230	Approved	(a) 3.5 lb/gal coating (minus water).	(a) Facilities emitting <100 tpy VOC from regulated surface coating operations.
VII	MO (St. Louis)	10 CSR 10-5.330	Approved	(a) 3.5 lb/gal coating (minus water).	(a) Facilities emitting <10 tpy VOC from coating.
IX	CA (BA)	8-19-100	Approved	(a) Baked coatings 3.0 lb/gal (1/1/83) 2.3 lb/gal (1/1/85) Air-dried coatings 3.5 lb/gal (1/1/83) 2.8 lb/gal (1/1/85) or approved equivalent. (b) Alternate emission control plan (bubble) to (a) above permitted if total emissions no greater than sum of individual sources and compliance demonstrated daily as described. (c) Achievement of transfer efficiency >65% yield emission credits for incremental efficiency for limit (b).	(a) Use of coating emitting <22 lb VOC/day if total emissions from all exempted coatings <44 lb/day. (b) Coating line that emits <22 lb VOC/day. (c) Touch up or repair operations. (d) Camouflage coating subject to approval by military agency for use on military equipment. (e) Coatings applied by template. (f) Small businesses exempted. If demonstrate material and equipment not reasonably available, owner complies with approved lowest reasonably achieveable limits.
IX	CA (SC)	1107	Approved	(a) Minimum transfer efficiency of 65%. (Electrostatic attraction, flow coat, and dip coat are considered equivalent to this requirement.) (b) 340 grams/liter of coating as applied excluding water when the products are dried at a temperature of 90°C (194°F) or below or 275 grams/liter when dried at a temperature at or above 90°C (194°F).	(a) Touch-up and repair. (b) Metallic and stencil coatings. (c) Facility that emits a total of <50 lbs VOC per day from coatings subject to this rule or <500 lbs VOC in any 30 consecutive days. (d) Use of methylene chloride, 1,1,1-trichloroethane, and trichlorotrifluoroethane. (e) Primary architectural coatings. (f) Coatings used in volumes <50 gal/yr if complying coatings are unavailable. (g) Pretreatment coatings. (h) Camouflage and military specification coatings. (i) Transfer efficiency requirement is not required where the physical and chemical characteristics or safety conditions of the coating prevent achieving 65% transfer efficiency subject to approval.

SOURCE CATEGORY: Surface Coating - Heavy Off-Highway Vehicle Production

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 25 [10 CSR 10-6.030(13)]	Not specified	Upon request. (a) Submit report as described. (b) Retain for 2 yrs.	(a) Applies to railroad cars, farm implements and machinery, and heavy-duty trucks. (b) Applies only in Clay, Jackson, and Platte Counties. (c) Approved plant-wide bubble permitted as described [2.230(c)]. (d) Compliance date 12/31/82.
EPA RM 25 [10 CSR 10-6.030(13)]	Not specified	Upon request. (a) Submit report as described. (b) Retain for 2 yrs.	(a) Applies to railroad cars, farm implements and machinery, and heavy-duty trucks. (b) Applies to South St. Louis area as described. (c) Approved plant-wide permitted as described [2.230(c)].
(a) Coating testing required for facilities where usage >5,000 gal/yr.	Not specified	(a) Coating lines where usage >5,000 gal/yr, submit reports to APCO quarterly describing coating test progress.	(a) Part of general miscellaneous metal parts and products rule.
Procedures outlined in Rule 107	Not specified	Not specified	(a) Part of general manufactured metal parts and products coatings rule.

SOURCE CATEGORY: Surface Coating - Heavy Off-Highway Vehicle Production (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (SC) (cont.)	1107			(2) Transfer efficiency requirement does not apply to contract painters that use <50 gallons of coating per day (until 1/1/85).

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Surface Coating - Leather

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.5 Table 3B	Approval pending	(a) $\leq$5.8 lb/gal. coating (minus water).	(a) Application rate $\leq$1 gal/hr and 5 gal/day. (b) Application for purpose of developing new coating or equipment or for performing research if rate $\leq$2 gal/hr and 3/gal/day.
V	WI		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method.	Not specified	(a) By 1/1/87, and once per quarter, submit progress reports.	(a) A weighted daily mean can be used to demonstrate compliance where more than one product is manufactured on a single surface coating line. (b) By 1/30/87, submit plan to achieve compliance. (c) By 5/1/87, commence construction or installation of control measures. (d) Achieve compliance by 12/31/87.

SOURCE CATEGORY: Surface Coating - Photographic Film

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	310 CMR 7.18(15)	Approved	$\leq$2.9 lb VOC/gallon coating (excluding water)	Facilities documenting they can not meet <2.9 lb/gallon requirement, who (a) By 9/7/81 submit program detailing study, development, and use of alternative coatings on lines currently emitting >2.9 lb/gallon (b) By 3/7/83 submit results of development (c) By, at most, 1/1/87 implement all low/no VOC coating conversions (d) Implement RACT for any facility where Department determines that compliance with 2.9 lb/gallon limit not feasible.

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA RM 24 and 25 or approved equivalent [310 CMR 7.18(2)(e)].	Not specified	Periodic reports at Department request [310 CMR 7.14(1)].	This regulation is Massachusetts paper coating regulation, but the regulation applies to surface coating of photographic film.

SOURCE CATEGORY: Surface Coating - Plastic Film

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VIII CO	Part 1, Reg. 7(1X)(K)	Approved	≤2.9 lb of solvent per gal. of coating (minus water)	(a) All rubbers and vinyls except vinyl tapes and vinyls coated with an adhesive or pressure sensitive coating [see 7(1X)(L)]. (b) Coating lines whose - maximum emissions ≤13 tpy and ≤100 lb/day; and - for sources with multiple coating lines, maximum emissions for all coating lines not meeting specific emission limits of 7(1X), ≤20 tpy; and ≤150 lb/day. (c) Emissions from any source of methane or ethane.
IX CA (BA)	8-12-100	Approved	(a) <1 lb VOC/gal coating applied (minus water), effective 1/17/81. (b) No liquid seals from coating storage containers or mixing tanks. Cover containers and tanks at all times.	(a) Coating line that emits <14.3 lb/day. (b) Coating line that does not apply heat to dry and/or cure coating. (c) Coatings of <2.2 lb VOC/gal. (d) Manufacturing of flexible packaging materials for packaging food or health care products for human or animal consumption. (e) Emissions from cleaning of coating line equipment. (f) Lines where painting or decorative design applied on the same line (see Rule 20).
IX CA (SC)	1145	Approved	(a) Coatings must contain < the following limits, lb VOC/gal coating as applied, minus water: Coating — Limit General coating one-component — 2.3 (1/1/85) two-component — 4.2 (1/1/85) 3.5 (1/1/86) Camouflage coating one-component — 3.5 (1/1/85) Military spec. coatings one-component — 3.5 (1/1/85) 2.8 (1/1/86) two-component — 4.2 (1/1/85) 3.5 (1/1/86) (b) Equivalent emission control plan (bubble) permissible as described.	(a) Touchup and repair. (b) Metallic coatings. (c) Stencil or mask coatings. (d) Clear or translucent coatings as described. (e) Mirror backing coatings. (f) Reflector coatings. (g) Coatings used <50 gal/yr if substitute complying coatings not available. (h) Coatings regulated or specifically exempted elsewhere.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Coating components: Method A - ASTM D 1644 ASTM D 1475 ASTM D 2369 ASTM D 3792 (b) Samples to be taken from coating as freshly delivered to reservoir of coating applicator.	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Regulation covers coating of paper fabric, and film.
VOC content of coatings determined pursuant to Rule 107.	Not specified	Not specified	(a) Regulation applies to plastic, rubber, and glass coatings and adhesives. (b) Coating operation subject to this rule shall comply with Rule 442 until compliance with this rule achieved. (c) Coatings exempt from this rule shall comply with Rule 442.

EPA Rgn State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III MD		Under development		
V MI		Under development		
VII MO (St. L.)	10 CSR 10-5.330	Approved	(a) 3.5 lb/gal coating.	(a) <50 tpy VOC from coating.
IX CA (BA)	8-31-100	Approved	(a) Effective 1/1/87, coating must contain ≤2.8 lb VOC/gal coating minus water, or emissions controlled to approved equivalent level. (b) May use alternative emission control plan (bubble) as described. (c) Achievement of transfer efficiency over 50% may be claimed as credit towards bubble. (d) For coatings applied to flexible parts: Coating — lb VOC/gal Coating Flexible primer — 4.4 (1/1/84); 4.1 (1/1/86) Color topcoat — 4.2 (1/1/84); 3.8 (1/1/86) Base coat/clear coat (combined system) — 4.5 (1/1/84); 4.5 (1/1/86)	(a) Application of adhesives. (b) After approval, coatings used in volumes <50 gal/yr where substitute complying coatings not available. (c) Metallic coatings. (d) Facilities with total coating usage <5000 gal/yr. (e) Touch-up, repair, uniforming, or reconditioning operations. (f) Camouflage coatings. (g) Conductive coatings. (h) Coatings applied to flexible parts, except 8-31-306 [limit (d)]. (i) Coatings applied to parts in an automobile assembly plant as described. (j) Small business, as described.
IX CA (SC)	1145	Approved	(a) Coatings must contain ≤ the following limits, lb VOC/gal coating as applied, minus water: Coating — Limit General coating one-component — 2.3 (1/1/85) two-component — 4.2 (2/2/85); 3.5 (2/2/86) Camouflage coating one-component — 3.5 (1/1/85) Military spec. coating one-component — 3.5 (1/1/85); 2.8 (1/1/86) two-component — 4.2 (1/1/85); 3.5 (1/1/86) (b) Equivalent emission control plan (bubble) permissible as described.	(a) Touch-up and repair. (b) Metallic coatings. (c) Stencil or mask coatings. (d) Clear or translucent coatings as described. (e) Mirror backing coatings. (f) Reflector coatings. (g) Coatings used <50 gal/yr if substitute complying coatings not available. (h) Coatings regulated or specifically exempted elsewhere.

Test Procedure	Averaging Time	Recordkeeping	Comments
			Automobile plastic parts only.
Not specified	Not specified	Not specified	
EPA RM 25 [10 CSR 10-0.030 (13)]	Not specified	(a) Submit reports as described when requested. (b) Retain for 2 years.	(a) Applies to South St. Louis area. (b) Approved plant-wide emission compliance plan permitted as described.
Not specified	Not specified	Not specified	(a) Interim limits of <3.5 lb/gal established from 1/1/85-1/1/87.
VOC content of coatings determined pursuant to Rule 107.	Not specified	Not specified	(a) Regulation applies to plastic, rubber, and glass coatings and adhesives. (b) Coating operation subject to this rule shall comply with Rule 442 until compliance with this rule achieved. (c) Coatings exempt from this rule shall comply with Rule 442.

SOURCE CATEGORY: Surface Coating - Tablets

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.5 Table 38	Approval pending	(a) $\leq$5.5 lb/gal coating (minus water). (b) If reduce VOC's by means other than reformulation, must reduce by $\geq$90% by weight per hour.	(a) Application rate $\leq$1 gal/h and 5 gal/day. (b) Application for purpose of developing new coating or equipment or for performing research if rate $\leq$2 gal/hr and 3 gal/day.
III	PA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9].	Not specified	(a) By 1/1/87, and once per quarter, submit progress reports.	(a) Weighted daily mean can be used to demonstrate compliance where >1 product is manufactured on a single surface-coating line. (b) By 1/30/87, submit plan to achieve compliance. (c) By 5/1/87, commence construction or installation of control measures. (d) Achieve compliance by 12/31/87.

SOURCE CATEGORY: Surface Coating - Urethane Coated Fabric

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
II	NJ	7:27-16.5 Table 3B	Approval pending.	(a) ≤3.8 lb/gal coating (minus water).	(a) Application rate ≤1 gal/h and 5 gal/day. (b) Application for purpose of developing new coating or equipment or for performing research if rate ≤2 gal/h and 3 gal/day.

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method. [7:27-16.9]	Not specified	(a) By 1/1/87, and once per quarter, submit progress reports.	(a) Weighted daily mean can be used to demonstrate compliance where >1 product is manufactured on a single surface coating line. (b) By 1/30/87, submit plan to achieve compliance. (c) By 5/1/87, commence construction or installation of control measures. (d) Achieve compliance by 12/31/87.

SOURCE CATEGORY: Surface Coating - Wood Furniture

<table>
<tr><th>EPA Rgn</th><th>State</th><th>Regulation No.</th><th>EPA Approval Status/Date</th><th>State Limit or Requirement</th><th>Exemptions/ Cutoffs</th></tr>
<tr><td>II</td><td>NJ</td><td>7:27-16.5 Table 3E</td><td>Approval pending</td><td><table>
<tr><th>Operation</th><th>lb/gal coating</th></tr>
<tr><td>Semitransparent stain</td><td>6.8</td></tr>
<tr><td>Wash coat</td><td>6.1</td></tr>
<tr><td>Opaque stain</td><td>4.7</td></tr>
<tr><td>Sealer</td><td>5.6</td></tr>
<tr><td>Pigmented coat</td><td>5.0</td></tr>
<tr><td>Clear topcoat</td><td>5.6</td></tr>
</table></td><td>(a) Application rate ≤1 gal/h and 5 gal/day.
(b) Application for purpose of developing new coating or equipment or for performing research if rate ≤2 gal/h and 3 gal/day.</td></tr>
<tr><td>III</td><td>PA</td><td></td><td>Under development</td><td></td><td></td></tr>
<tr><td>V</td><td>IL</td><td>215.204(l)</td><td>Approval pending</td><td><table>
<tr><th>Operation</th><th>lb/gal coating</th></tr>
<tr><td>Clear topcoat</td><td>5.6</td></tr>
<tr><td>Opaque stain</td><td>4.7</td></tr>
<tr><td>Pigmented coat</td><td>5.6</td></tr>
<tr><td>Repair coat</td><td></td></tr>
<tr><td>Sealer</td><td>5.6</td></tr>
<tr><td>Semitransparent stain</td><td>6.6</td></tr>
<tr><td>Wash coat</td><td>6.1</td></tr>
</table></td><td>Not specified</td></tr>
<tr><td>V</td><td>IN</td><td></td><td>Under development</td><td></td><td></td></tr>
<tr><td>IX</td><td>CA (BA)</td><td>8-32-100</td><td>Approved</td><td>(a) Use at least one of the following application methods for all coatings: airless spray, air-assisted airless spray, heated airless spray, low pressure spray (coating with solid content >25%), dip and drain, rollercoat, wipe or brush, electrostatic air spray.
(b) Transfer efficiency assumed to be as follows, unless measured otherwise:<table>
<tr><th rowspan="2">Application Method</th><th colspan="2">Transfer Efficiency, %</th></tr>
<tr><th>Case Goods</th><th>Non-Case Goods</th></tr>
<tr><td>Air spray</td><td>30</td><td>15</td></tr>
<tr><td>Electrostatic disk or bell atomizer</td><td>NA</td><td>85</td></tr>
<tr><td>Electrostatic air spray</td><td>75</td><td>65</td></tr>
<tr><td>Airless spray</td><td>50</td><td>25</td></tr>
<tr><td>Air-assisted airless spray</td><td>50</td><td>25</td></tr>
<tr><td>Dip and drain</td><td>90</td><td>95</td></tr>
<tr><td>Rollercoat, wipe and brush</td><td>95</td><td>NA</td></tr>
</table>(c) Approved alternative emission control plan allowable as described. Reductions based on assumed transfer efficiencies provided and on baseline solvent contents provided in rule.</td><td>Facility where total coating use for lines herein regulated ≤500 gal/yr.</td></tr>
<tr><td>IX</td><td>CA (SC)</td><td>1136</td><td>Approved</td><td>(a) Use airless or air-assisted airless spray or achieve equivalent total emissions reductions.
(b) To calculate equivalent emissions reductions, use of low solvent coatings and/or high transfer efficiency application methods, use baseline VOC coating content provided in (b)(1)(A).
(c) Unless actual measured transfer efficiencies known, shall be assumed to be as follows:<table>
<tr><th>Application method</th><th>Transfer efficiency, %</th></tr>
<tr><td>Air spray</td><td>24</td></tr>
<tr><td>Electrostatic disk or bell atomizer</td><td>85</td></tr>
<tr><td>Electrostatic air spray</td><td>70</td></tr>
<tr><td>Airless spray</td><td>40</td></tr>
<tr><td>Heated airless spray</td><td>40</td></tr>
<tr><td>Air-assisted airless spray</td><td>40</td></tr>
<tr><td>Dip and drain</td><td>90</td></tr>
<tr><td>Rollercoat, wipe or brush</td><td>95</td></tr>
</table>(d) Facilities using >10,000 gal during 12-months before 9/1/83 shall submit plan to demonstrate feasibility of achieving further emission reductions as described.</td><td>(a) Washcoat, toner, or semitransparent stain application, until 6/6/85.
(b) Touch-up and repair.
(c) Operations using <1,000 gal/yr.</td></tr>
</table>

Test Procedure	Averaging Time	Recordkeeping	Comments
Department approved method [7:27-16.9].	Not specified	(a) By 1/1/87, and once per quarter, submit progress reports.	(a) Weighted daily mean can be used to demonstrate compliance where >1 product is manufactured on a single surface-coating line. (b) By 5/1/87, commence construction or installation of control measures. (c) By 12/31/87, achieve compliance.
			(a) Will be part of a generic wood coating regulation.
(a) Flame ionization detector or approved alternative [215.102]. (b) Transfer efficiency test method under development.	Not specified	Not specified	(a) Repair coat has overall trans efficiency of 30%; all others have overall transfer efficiency of 65%. (b) Comply by 12/31/85. (c) Regulation will continue to be approval pending if approvable transfer efficiency test method submitted.
			(a) Will apply to wood furniture and cabinets.
Method 21 or 22, "Manual of Procedures," Vol. III, for sample analysis.			(a) Emissions of precursor organic compounds from wood furniture and cabinet coatings. (b) Comply by 1/1/86.
Procedures outlined in Rule 107.	Not specified	Not specified	(a) Rule covers wood furniture and cabinets.

SOURCE CATEGORY: Tobacco Processing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
III	VA		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Valves and Flanges

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (BA)	8-28-100	Approved	(a) No pressure relief valves on equipment that fails to reseat upon equipment depressurization unless: - vapor recovery or disposal system ≥95% effective used, or - pressure relief valve protected by a rupture disc. (b) Inspect quarterly unless: - ≥95% effective vapor recovery or disposal systems used, or - pressure relief valve not accessible.	(a) Externally regulated pressure relief valve. (b) Pressure relief valve in liquid service. (c) Pressure relief valve on storage tanks.
IX	CA (BA)	8-22-100	Approved	(a) No valve or flange handling POC where leak >10,000 ppm unless: - nonessential valve or flange repaired ≤15 days - essential valve or flange, leak minimized ≤15 days - where repair unsuccessful, repair valve at next turnaround, but ≤6 months. (b) Any valve or flange handling POC where leak >75,000 ppm, repair ≤15 days. (c) Clearly identify leaking components. (d) May use approved alternative inspection plan if any leaking component: tagged and then reinspected ≤3 months, after repairs and inspected 1 yr.	(a) Valves or flanges in inaccessible location. (b) Valves or flanges on instrument and sample lines. (c) Valves or flanges that handle only organic liquids with <1.5 psia Reid vapor pressure. (d) Valves or flanges that handle only natural gas. (e) Valves or flanges in research facilities
IX	CA (SC)	466.1	Approved	(a) Valves at end of pipe or line must be sealed with blind flange, plug, or cap when not in use. (b) Affix 12-month record of inspections to leaking valves for subsequent year. (c) Valves or flanges found leaking by District personnel within 5 days of scheduled inspection by plant shall be violation if leak >3 drops/min or >75,000 ppm. (d) Inspect valves annually as described. (e) Reinspect repaired valves 3 months after repair. If leaking, repair ≤30 days. If still leaking, repair and reinspect at succeeding intervals of half the previous interval and ≥1/day. (f) Inspect process piping flanges annually. (g) Repair leaking valve or flange ≤2 days. If leak continues, emergency repairs shall be made, emissions shall be vented to approved control device, or variance shall be filed next day.	(a) For limit (a), valves on product sampling line, safety pressure relief valve, bleeder valve in double lock and bleeder valve system. (b) Periodic monitoring using detection equipment if use approved continuous monitoring flammable gas detection devices that send a visual or audible signal of a leak. (c) Periodic inspection of flanges exempt from recordkeeping. (d) Valves or flanges handling gases in which commercial natural gas only VOC. (e) Valves or flanges infeasible or unsafe to monitor. (f) Valves or flanges handling gas with ≥80% hydrogen. (g) Valves or flanges regulated by Rule 1005.

Test Procedure	Averaging Time	Recordkeeping	Comments
		(a) Report venting from regulated pressure relief valve on subsequent normal working day.	(a) Applies to pressure relief valves at petroleum refineries and chemical plants. (b) POC = precursor organic compound.
(a) Portable combustible gas indicator approved by APCO or approved equivalent. (b) Reid vapor pressure - as prescribed in Manual of Procedures, Vol. III, Method 13.	Not specified	(a) Retain records 1 year. (b) Maintain record identifying valves and flanges awaiting repair.	(a) Applies to chemical plants. (b) POC = precursor organic compound as defined.
(a) Calibrate detection devices with hexane. (b) Measurement of gaseous leakage may be conducted within a distance of 2 inches using approved concentration vs. distance relationship.		(a) Maintain records for 1 year. (b) Maintain records necessary to demonstrate compliance with annual inspection requirements.	(a) A leak is >3 liquid VOC drops per minute, or >10,000 gaseous VOC as detected by a portable hydrocarbon detection instrument. (b) Applies to petroleum refineries and chemical plants. (c) Persons complying with rule exempt from Rule 430 as applies to valves or flanges.

SOURCE CATEGORY: Valves and Flanges (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (SC)	467	Approved	(a) Vent pressure relief device to vapor recovery or disposal system or inspect according to this rule. (b) Inspection: - Visually inspect each PRV on each working day - Monitor each PRV with hydrocarbon detection instrument quarterly - If PRV and rupture disc in series, inspect downstream device - Monitor pressure relief device ≤15 working days from venting - Inspect pressure relief device ≤15 days after return to service. (c) Repair within 15 days or at next turnaround if process shutdown required.	(a) After 4 quarterly inspections of PRV where no leakage found, may monitor annually. (b) Leaking devices tagged for repair at turnaround need not be inspected before turnaround. (c) Leak exempt if operator shows leak due to contribution of ethane or other non-VOC compound. (d) Inspection of devices unsafe to monitor. (e) Pressure-vacuum vent valves in storage tanks. (f) Functional operation of device to relieve overpressure condition. (g) Devices ≤1 in. installed for thermal protection.

SOURCE CATEGORY: Valves and Flanges (continued)

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) Calibrate instrument used to measure VOC with hexane at 1 liter/minute. (b) Perform sampling at center of exhaust stack for valve and at center of leakage path for other devices.		(a) Maintain inspection records. (b) Maintain central repair action leg or tag all devices observed to leak.	(a) Applies to pressure relief devices. (b) A leak is >3 liquid drops/minute or >10,000 ppm VOC measured by portable hydrocarbon detection instrument. (c) PRV = pressure relief valve.

SOURCE CATEGORY: Vegetable Oil Processing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
IX	CA (BA)		Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

SOURCE CATEGORY: Waste Gas Disposal

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	22-174-20 (e)	Approved	(a) Ethylene producing plant or emission source-burn waste gas stream at 1300°F for >0.3 sec. in a direct flame after burner or equivalent. (b) Vapor blow-down/emergency relief-burning by smokeless flares or equivalent.	(a) Emergency relief and vapor blow-down systems for ethylene producing plant. (b) Will be considered if frequency of venting and potential release quantity are low or in case of safety hazard for vapor blowdown.
III	D.C.	712 and 713	Approved	(a) Ethylene producing plant: ≤20 lb/24 hrs. (b) Vapor blowdown system: smokeless flares or approved equivalent [713].	(a) For limit (a) waste streams that are properly burned at 1300°F for >0.3 seconds in a direct-flame afterburner, or that are removed by approved method of comparable efficiency. (b) Limit (b) doesn't apply to accidental or emergency emissions of hydrocarbons needed for safe operation of equipment and processes.
VI	LA	22.8	Approved	(a) Operations commencing construction <1/1/85, burn nonhalogenated hydrocarbons at 1300°F for ≥0.3 seconds in a direct-flame afterburner or equivalent. (b) Operations commencing construction ≥1/1/85, burn nonhalogenated hydrocarbons at 1600°F for >0.5 seconds in a direct-flame afterburner, thermal incinerator or other device achieving ≥98% destruction and removal efficiency or emissions of 20 ppm, whichever is less stringent. (c) Halogenated hydrocarbons may be combusted by other approved methods.	(a) Waste gas stream <100 tpy. (b) Waste stream will not support combustion without auxiliary fuel. (c) Disposal cannot be accomplished practically or safely. (d) Safety relief and vapor blowdown systems where control is not safe or economically feasible.
VI	OK	3.7.4(a)	Approved	(a) Waste gas stream from ethylene manufacturing plant burned at 1300°F for ≥0.3 seconds in a direct-flame afterburner with pyrometer or equally effective catalytic incinerator with pyrometer; ≥98% ethylene emissions reduced. (b) For emissions from a vapor recovery blowdown system, smokeless flare or equivalent alternative.	(a) For limit (b), where inconsistent with the "Minimum Safety Standards for the Transportation of Natural and Other Gas by Pipeline" or any Oklahoma regulatory agency. (b) Storage, loading, processing, manufacturing, burning of organic material on farms and ranches.
VI	TX	§115.42 and §115.162 and §115.163	Approved		
IX	CA (BA)	8-34-100	Approved	(a) Collect landfill gases through an approved gas collection system. (b) Burn collected gases in a flare or internal combustion engine; or reduce gases by ≥90% by weight in a control device or facility; or collect and process gases for delivery to a fuel distribution pipeline.	(a) Landfills with in-place tonnage of less than 1 million tons. (b) Landfills with a disposal rate of less than 150 tons per day. (c) Landfills with an average refuse depth of <20 feet or a surface area <20 acres. (d) Landfills classified "Class III" as defined by the State Water Resources Control Board. (e) Landfills that are no longer operational, if in-place tonnage is <2 million tons, and average refuse depth is <40 feet or surface area is <40 acres.

Test Procedure	Averaging Time	Recordkeeping	Comments
Manner approved by the Commissioner [22a-174-5(a)(b)(6)].	Not specified	Not specified	
Not specified	Not specified	Any source emitting >25 tpy of air pollutant must maintain written records including emission data, and procedures of sampling [500.2].	Regulation [712] is also summarized under the ethylene production source category.
Not specified	Not specified	Not specified	(a) Includes process unit upsets, startups, and shutdowns. (b) Limit (b) has never been a part of Louisiana's approved SIP. (c) Applicable FR notices are 45 FR 9903, 45 FR 11798, and 47 FR 6015.
Not specified	Not specified	Not specified	
			Covered under General Rule.
Emissions shall be measured as prescribed in the Manual of Procedures Volume IV, ST-7	Not specified	Not specified	

SOURCE CATEGORY: Waste Gas Disposal (continued)

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/Cutoffs
IX	CA (SC)	1150.1	Approval pending	(a) Install and maintain landfill gas control system to draw landfill gas toward the gas collection devices without overdraw that would adversely affect the system. (b) Install sampling probes at perimeter of landfill to determine if offsite migration exists. (c) Determine concentrations of total organic compounds and any air toxic air contaminants on a monthly basis. (d) Collect sufficient landfill gas with landfill gas control system to prevent concentration of total organic compounds from exceeding 50 ppm. (e) Not allow maximum concentration of organic compounds to exceed 500 ppm measured as methane at any surface point. (f) Dispose of collected gas by combustion, gas treatment and subsequent sale, sale and processing offsite, or other equivalent methods to achieve the maximum possible efficiency.	(a) All or a portion of a landfill may be exempted if no adverse impact on air quality can be demonstrated.
IX	CA (SC)	1150.2	Approval pending	If a landfill gas control system is required, the limits and requirements are the same as for active landfills (see above).	Same as for active landfills.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	(a) Results of air samples are to be reported quarterly. (b) Results of efficiency test of the combustion equipment or gas treating facility on an annual basis and maintained for at least 2 years.	(a) Control of gaseous emissions from active landfills. (b) Mitigation measures are required to prevent public nuisance during installation of the landfill gas control system. (c) Plan to comply with this rule is required before recommending the operation of a previously closed landfill or to commence operations of a newly established landfill.
Not specified	Not specified	Same as active landfills	(a) Control of gaseous emissions from inactive landfills. (b) Owner supplies the District with specified information to determine whether the gas generated from the landfill needs to be collected. (c) Mitigation measures are required to prevent public nuisance during installation of the landfill gas control system.

SOURCE CATEGORY: Water Separation

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirements	Exemptions/ Cutoffs
I	CT	22-174-20 (c)	Approved	(a) Openings sealed, liquid enclosed (b) Floating roof (c) Gas-tight sampling/gauging devices (d) Vapor recovery system	Separators receiving <200 gal with vapor pressure <1.5 psia
III	MD	10.18.06.06 (c)	Approved	(a) Single or multiple compartment VOC-water separators must have either: - a floating roof equipped with seals to close the space between the roof edge and tank wall, or - vapor recovery system preventing VOC discharge to atmosphere, or - Approved equivalent. (b) Tank gauging and sampling devices gas tight, except when in use.	Separators receiving <200 gal/day, with vapor pressure <1.5 psi.
IV	AL	6.2	Approved	(a) Control with one of the following: - sealed openings totally enclosing the liquid contents - floating roof or internal floating cover - vapor recovery system - equivalent equipment (b) All gauging or sampling devices are to be gas-tight except when gauging or sampling is occurring.	(a) Separators receiving effluent water containing <1,000 gallons/day of VOC. (b) Sources with a potential VOC emission rate of <100 tons per year. (c) Sources used exclusively for chemical or physical analysis or determination of product quality and commercial acceptance provided the operation is not an integral part of the production process and emissions do not exceed 800 lbs in any calendar month. (d) Sources located outside Mobile County and which were built before 1/30/73.
IV	KY	401 KAR 61:045	Approved	(a) Equip any oil-effluent water separator with floating roof, vapor recovery system, or equivalent. (b) Gauging and sampling devices gas tight except when gauging and sampling occurring.	(a) Oil-effluent water separators used exclusively in conjunction with crude oil production.
VI	LA	22.6.1	Approved	(a) Equip with container either having all openings sealed, having a floating roof as described, having a vapor disposal system, or approved equivalent.	(a) Separators ≤100 tpy VOC emissions.
VI	OK	3.7.2(c)	Approved	(a) Equip with one of the following: - sealed openings totally enclosing liquid con- - floating roof, pontoon, double-deck or internal floating cover type, - vapor recovery system, - approved equivalent	(a) Storage, loading, processing, manufacturing, burning of organic material on farms and ranches. (b) Separator receiving <200 gal/day.
VI	TX	V§115.31	Approved	(a) Control with one of the following: - sealed openings totally enclosing liquid contents, - floating roof or internal floating cover, - vapor recovery system that achieves vapor pressure ≤1.5 psia in gases vented to atmosphere.	(a) Separator receiving <200 gal/day and vapor pressure <1.5 psia. (b) Separators used only for production of crude oil or condensate.

SOURCE CATEGORY: Water Separation

Test Procedure	Averaging Time	Record-keeping	Comments
Manner approved by the Commissioner [22a-174-5(a)(b)(6)]	Not specified	Not specified	
Those specified in Air Management Administration Technical Memorandum 83-05, "State Test Methods for Stationary Sources," June 1983 Revision 1 [10.18.01.04(c)].	Not specified	Not specified	
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	(a) Recodification of regulations in progress.
Not specified	Not specified	Not specified	(a) Effluent water separators, single and multiple compartment. (b) EPA has proposed disapproval of exemption 3.7.1(d)(3).
Not specified	Not specified	Not specified	(a) Counties: Aransas, Bexar, Calhoun, Hardin, Matagorda, Montgomery, San Patricio, and Travis.

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirements	Exemptions/ Cutoffs
VI	TX	V§115.141	Approved	(a) Control with one of the following: - sealed openings totally enclosing liquid contents, - floating roof or internal floating cover, - for facilities other than petroleum refineries only, a vapor recovery system that achieves vapor pressure ≤1.5 psia in gases vented to atmosphere.	(a) For facilities other than petroleum refineries, separator receiving <200 gal/day and vapor pressure <1.5 psia. (b) For petroleum refineries, separators receiving <200 gal/day and vapor pressure <0.5 psia. (c) Separators used only for production of crude oil or condensate.
IX	CA (BA)	8-8-100	Approved	(a) Operate within rated capacity. (b) Equip with either: solid cover, floating pontoon or double-deck type cover as described, a vapor recovery system 90% effective, or approved equivalent. (c) Cover, seal, or lid on gauging and sampling devices. (d) Cover on wastewater separator forebay.	(a) Separator processing <200 gal/day of wastewater containing organic liquids (except petroleum refinery complexes after 3/1/80). (b) Wastewater processed through separator where liquid exerts Reid vapor pressure ≤0.5 psi.
IX	CA (SD)	65	Approved 6/30/72	(a) Use one of the following: solid cover, floating pontoon or double-deck type cover, vapor recovery device ≥90% effective, or approved equivalent.	(a) Separators recovering <200 gal/day of petroleum products from equipment processing hydrocarbons with Reid vapor pressure ≥0.5 psi. (b) Separator used exclusively in production of crude oil, if water fraction of effluent contains <5 ppm hydrogen sulfide, organic sulfides, or a combination.
IX	CA (SC)	464	Approved	(a) Equip with solid cover, floating pontoon or double-deck type cover equipped with seals as described, or approved equivalent. (b) Cover or lid on all gauging and sampling devices in compartment cover. (c) Cover wastewater separator forebay. (d) Charge skimmed oil or tar to process unit with feed or transfer to approved container.	(a) Gravity-type separators used only in production of crude oil, if entering wastewater contains <5 ppm hydrogen sulfide, organic sulfide, and <100 ppm ammonia. (b) Units with coal tar products of <0.2 psi vapor pressure. (c) Except for coal tar separators, compartments that exceed the valve 420 as calculated by equations (c)(3).

Test Procedure	Averaging Time	Record-keeping	Comments
			(a) Counties: Brazoria, Dallas, El Paso, Galveston, Gregg, Harris, Jefferson, Nueces, Orange, Tarrant, Victoria.
(a) Method 13, "Manual of Procedures," Vol. III. (b) ST-7, "Manual of Procedures," Vol. IV.	Not specified	Not specified	
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	

SOURCE CATEGORY: Wool Fiberglass Manufacturing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
VII	KS	28-19-74	Approval pending	(a) 5 lb VOC/ton of glass pulled.	(a) Sources <100 tpy on a facility-wide basis.

Test Procedure	Averaging Time	Recordkeeping	Comments
(a) EPA RM 5E. (b) EPA RM 1 for stack sampling. (c) EPA RM 2 for stack gas velocity and flow rate. (d) EPA RM 3 for stack gas molecular weight. (e) EPA RM 4 for stack gas moisture content.	Not specified	(a) Retain for 2 years all records necessary to demonstrate continuous compliance.	

TABLE 5

SOURCE SPECIFIC RACT DETERMINATIONS

RACT SOURCE CATEGORY: Adhesives/Gaskets

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Raymark Corporation	Under development	(a) 90% overall efficiency on gasket saturation. (b) Operating restrictions on other processes.	

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA approved method.		(a) Daily recordkeeping of VOC usage on all processes. (b) Monitoring of pumps.	

RACT SOURCE CATEGORY: Boat Manufacture/Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	(a) Boston Whaler, Norwell	Under development		
		(b) Boston Whaler, Rockland	Under development		
I	MA	Starcraft Sailboat Products, Inc.	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Charcoal Manufacture

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Connecticut Charcoal Company	Approved (11/20/86)	(a) Use incinerator to control charcoal kiln emissions (b) Maintain draft and leakage control to yield >90% emission capture (c) Use air-atomization type incinerator burner nozzles (d) Operate incinerator ≥1500°F, achieving 1800°F during operation (e) Residence time ≥0.5 sec. (f) Use both burners at startup	

Test Procedure	Averaging Time	Recordkeeping	Comments
		(a) Inspect burner operation once per day (b) Record operating temperature at start and mid-point of each production cycle	

RACT SOURCE CATEGORY: Chemical Manufacturing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit of Requirement	Exemptions/ Cutoffs
I	MA	Monsanto	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Fabric Printing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	Duio Textile	Under development		
I	MA	Cranston Printworks	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Fluorescent Lights

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	North American Philips Lighting Co.	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Golf Balls

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	Acushnet	Under development		
I	MA	Spaulding	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Helicopter Painting/Degreasing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Sikorsky Aircraft	Under development	(a) Emission limits on each spray booth. (b) 85% reduction on flow coater. (c) CTG requirements for each degreaser.	Not specified

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Daily recordkeeping of VOC usage for each spraybooth, degreaser, and the flow coater.	

RACT SOURCE CATEGORY: Miscellaneous Automobile Surface Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	General Motors, Framingham	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

RACT SOURCE CATEGORY: Oil Corrosion Inhibitors

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	King Industries	Approved 2/19/87	(a) Install chilled water condensers on 2 neutralization reactors (b) Install scrubber on 3 sulfonation reactors (c) Install continuous distillation process to replace 2 batch stills (d) Make modifications to 1 neutralization reactor and certain vessels and storage tanks	

Test Procedure	Averaging Time	Recordkeeping	Comments
Department-approved emission testing techniques, material balance, best engineering estimate, or approved equivalent.		(a) Retain for 3 years. (b) Maintain logs defining operating parameters necessary to demonstrate compliance for each process. (c) Weekly measurement of carbon canister performance using hydrocarbon detection meter. (d) Daily leak detection (visual and LEL) for all VOC discharge points.	

RACT SOURCE CATEGORY: Plastics and Polymers Manufacturing

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	American Cyanamid	Under development	81% reduction on all emission points greater than 40 lb/day.	Emission points of <40 lb/day.
I	CT	Uniroyal Chemical	Under development	Control equipment on all emission points greater than 40 lb/day.	Emission points of <40 lb/day.

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	Not specified	
Not specified	Not specified	Not specified	

RACT SOURCE CATEGORY: Plastic Parts Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirements	Exemptions/ Cutoffs
I	RI	Providence Metallizing	Approval pending 7/7/87	(a) 3.5 lb VOC/gal coating on a facility-wide basis. (b) VOC emissions rate from all spray booths (on solids applied basis) ≤6 lb/gal solids applied on a daily basis. (c) If existing coating that contains over 3.5 lb/gal VOC is replaced, must replace with one that will emit less on solids applied basis, unless coating applied in a booth where stack controlled.	

Test Procedure	Averaging Time	Record-keeping	Comments
EPA approved method.		(a) Record coating usage by formula on daily basis for both controlled and uncontrolled booths. (b) Maintain for 3 years. (c) Submit emission inventory data yearly.	

RACT SOURCE CATEGORY: PVC Foam Products

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Dow Chemical	Under development	(a) CTG requirements on polymer resins manufacturing processes. (b) Emission limits for each product for styrofoam manufacturing process.	

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA test methods.	(a) 3 hours for resins process. (b) Instantaneous for styrofoam products.	Not specified	

RACT SOURCE CATEGORY: Staple and Nail Manufacture

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	RI	Stanley Bostitch	12/11/86 Approved	(a) Maintain emission rates: Nails: ≤66.7 lb VOC/gallon solids applied Staples: ≤53.3 lb VOC/gallon solids applied Paints: ≤41.3 lb VOC/gallon solids applied (b) VOC coating content: Nails: 4.3 lb/gal Staples: 2.9 lb/gal on major use coatings Paints: 3.05 lb/gal (c) Bostitch agreed to detailed schedule increasing of low/no VOC solvents and higher solids paints replacing coatings and paints traditionally used. Included necessary equipment modifications. (d) Never replace coating with one emitting more VOC per amount solids applied.	Not specified

Test Procedure	Averaging Time	Recordkeeping	Comments
Not specified	Not specified	(a) Submit data pertaining to all coatings used, VOC emission rate, volume percent solids and solvent, densities of components. (b) Keep records of coating distribution among lines. (c) Document efforts to maximize volume. (d) Submit quarterly reports.	

RACT SOURCE CATEGORY: Styrofoam Manufacture

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Spongex Corporation	Under development	65% overall reduction with either add-on equipment or reformulation.	Not specified

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA test methods.	Not specified	VOC content of each batch dough mix.	

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	CT	Belding-Corticelli Thread Company	Approval pending 7/13/87	Install modified combustion units and make capture efficiency improvements on thread coating drying towers to achieve >65% capture and >97% destruction efficiencies. Install monitors sufficient to confirm compliant operation of the control equipment. Submit operations and maintenance plan.	
I	CT	Hemingway & Bartlett	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments
EPA & DEP-approved methods.		Continuous temperature recorders for combustion units.	In compliance by 12/31/87.
		Monthly monitoring and testing of VOC concentrations.	NPR published.

RACT SOURCE CATEGORY: Transformer Coating

EPA Rgn	State	Regulation No.	EPA Approval Status/Date	State Limit or Requirement	Exemptions/ Cutoffs
I	MA	General Electric, Pittsfield	Under development		

Test Procedure	Averaging Time	Recordkeeping	Comments

APPENDIX A

STATE AND EPA REGIONAL CONTACT LIST

STATE AND EPA REGIONAL CONTACTS

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AGENCY:
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Colorado

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REGULATION(S)/AREA: Colorado regulations.

AGENCY:
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REGULATION(S)/AREA:

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REGULATION(S)/AREA: Connecticut CTG regulations and non-CTG RACT determination.

AGENCY: Connecticut Department of Environmental Protection
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AGENCY:
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REGULATION(S)/AREA:

Delaware

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D.C.

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Georgia

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REGULATION(S)/AREA: /AREA: VOC regulations

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AGENCY:
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Indiana

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Kentucky

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Louisiana

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AGENCY: Louisiana Department of Environmental Quality
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Maine

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AGENCY:
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Michigan

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AGENCY:
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AGENCY:
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Nevada

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AGENCY:
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REGULATION(S)/AREA:

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New York

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AGENCY:
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AGENCY:
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Oklahoma

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AGENCY:
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AGENCY:
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AGENCY:
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AGENCY:
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